

19 August, 2003

Bruce Lewis Environmental Resources Management 2525 Natomas Park Drive, Suite 350 Sacramento, CA 95833

RE: Aerojet RI/FS Work Order: P308004

Enclosed are the results of analyses for samples received by the laboratory on 07/29/03 17:05. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Angelee Cari Project Manager

CA ELAP Certificate #2374

Angelee Care





Project Number: N/A
Project Manager: Bruce Lewis

P308004 **Reported:** 08/19/03 16:23

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
35D-SB26-20	P308004-01	Soil	07/28/03 16:15	07/29/03 17:05
35D-SB26-25	P308004-02	Soil	07/28/03 16:42	07/29/03 17:05
37D-SB01-2.5	P308004-03	Soil	07/29/03 10:20	07/29/03 17:05
37D-SB01-6	P308004-04	Soil	07/29/03 10:39	07/29/03 17:05
37D-SB01-10	P308004-05	Soil	07/29/03 10:46	07/29/03 17:05
37D-SB01-15E	P308004-06	Water	07/29/03 11:00	07/29/03 17:05
37D-SB01-15	P308004-07	Soil	07/29/03 11:11	07/29/03 17:05
37D-SB01-20	P308004-08	Soil	07/29/03 11:32	07/29/03 17:05
37D-SB01-25	P308004-09	Soil	07/29/03 11:56	07/29/03 17:05
37D-SB01-30	P308004-10	Soil	07/29/03 12:17	07/29/03 17:05
37D-SB01-30D	P308004-11	Soil	07/29/03 12:17	07/29/03 17:05
37D-SB01-35	P308004-12	Soil	07/29/03 12:40	07/29/03 17:05
37D-SB01-40	P308004-13	Soil	07/29/03 13:12	07/29/03 17:05





Project: Aerojet RI/FS
Project Number: N/A
Project Manager: Bruce Lewis

P308004 **Reported:** 08/19/03 16:23

### Total Petroleum Hydrocarbons as Diesel & others by EPA 8015B Sequoia Analytical - Petaluma

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
37D-SB01-2.5 (P308004-03) Soil	Sampled: 07/29	0/03 10:20	Received	l: 07/29/0	3 17:05					
Diesel Range Organics (C10-C28)	24		5.0	mg/kg	1	3080068	08/05/03	08/07/03	EPA 8015B-SVOA	
Surrogate: Octacosane		174 %	52-1.	33		"	"	"	"	S-02
37D-SB01-6 (P308004-04) Soil	Sampled: 07/29/0	3 10:39	Received:	07/29/03	17:05					
Diesel Range Organics (C10-C28)	6.2		5.0	mg/kg	1	3080068	08/05/03	08/07/03	EPA 8015B-SVOA	
Surrogate: Octacosane		120 %	52-1.	33		"	"	"	"	
37D-SB01-10 (P308004-05) Soil	Sampled: 07/29/	/03 10:46	Received	: 07/29/0	3 17:05					
Diesel Range Organics (C10-C28)	ND		5.0	mg/kg	1	3080068	08/05/03	08/07/03	EPA 8015B-SVOA	
Surrogate: Octacosane		97 %	52-1.	33		"	"	"	"	
37D-SB01-15E (P308004-06) Wat	ter Sampled: 0'	7/29/03 11	:00 Rece	ived: 07/2	29/03 17:05	5				
Diesel Range Organics (C10-C28)	ND		0.050	mg/l	1	3080053	08/05/03	08/07/03	EPA 8015B-SVOA	
Surrogate: Octacosane		108 %	54-14	41		"	"	"	"	
37D-SB01-15 (P308004-07) Soil	Sampled: 07/29/	/03 11:11	Received	: 07/29/0	3 17:05					
Diesel Range Organics (C10-C28)	5.7		5.0	mg/kg	1	3080068	08/05/03	08/07/03	EPA 8015B-SVOA	
Surrogate: Octacosane		119 %	52-1.	33		"	"	"	"	
37D-SB01-20 (P308004-08) Soil	Sampled: 07/29/	/03 11:32	Received	: 07/29/0	3 17:05					
Diesel Range Organics (C10-C28)	18		5.0	mg/kg	1	3080068	08/05/03	08/07/03	EPA 8015B-SVOA	
Surrogate: Octacosane		156 %	52-1.	33		"	"	"	"	S-02
37D-SB01-25 (P308004-09) Soil	Sampled: 07/29/	/03 11:56	Received	: 07/29/0	3 17:05					
Diesel Range Organics (C10-C28)	ND		5.0	mg/kg	1	3080068	08/05/03	08/07/03	EPA 8015B-SVOA	
Surrogate: Octacosane		97 %	52-1.	33		"	"	"	"	



 $\begin{array}{ccc} & Project: & Aerojet \ RI/FS \\ Project \ Number: & N/A \end{array}$ 

P308004 **Reported:** 08/19/03 16:23

### Total Petroleum Hydrocarbons as Diesel & others by EPA 8015B Sequoia Analytical - Petaluma

Project Manager: Bruce Lewis

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
37D-SB01-30 (P308004-10) Soil	Sampled: 07/2	29/03 12:17	Received	07/29/0	3 17:05					•
Diesel Range Organics (C10-C28)	ND		5.0	mg/kg	1	3080068	08/05/03	08/07/03	EPA 8015B-SVOA	
Surrogate: Octacosane		92 %	52-13	33		"	"	"	"	
37D-SB01-30D (P308004-11) Soil	Sampled: 07	7/29/03 12:1	7 Receive	d: 07/29/	03 17:05					
Diesel Range Organics (C10-C28)	ND		5.0	mg/kg	1	3080068	08/05/03	08/07/03	EPA 8015B-SVOA	
Surrogate: Octacosane		100 %	52-13	33		"	"	"	"	
37D-SB01-35 (P308004-12) Soil	Sampled: 07/2	29/03 12:40	Received	07/29/0	3 17:05					
Diesel Range Organics (C10-C28)	ND		5.0	mg/kg	1	3080068	08/05/03	08/07/03	EPA 8015B-SVOA	
Surrogate: Octacosane		102 %	52-1.	33		"	"	"	"	
37D-SB01-40 (P308004-13) Soil	Sampled: 07/2	29/03 13:12	Received	07/29/0	3 17:05					
Diesel Range Organics (C10-C28)	ND		5.0	mg/kg	1	3080068	08/05/03	08/07/03	EPA 8015B-SVOA	
Surrogate: Octacosane		102 %	52-1.	33		"	"	"	"	



Project: Aerojet RI/FS
Project Number: N/A
Project Manager: Bruce Lewis

P308004 **Reported:** 08/19/03 16:23

### Tentatively Identified Compounds by GC/MS Sequoia Analytical - Petaluma

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
35D-SB26-20 (P308004-01) Soil	Sampled: 07/28/	03 16:15	Received	07/29/0	3 17:05					
No TICs found	ND		300	ug/kg	1	3080047	08/05/03	08/13/03	EPA 8270C	
35D-SB26-25 (P308004-02) Soil	Sampled: 07/28/	03 16:42	Received	07/29/0	3 17:05					
No TICs found	ND		300	ug/kg	1	3080047	08/05/03	08/13/03	EPA 8270C	
37D-SB01-6 (P308004-04) Soil	Sampled: 07/29/0	3 10:39	Received:	07/29/03	3 17:05					
No TICs found	ND		300	ug/kg	1	3080047	08/05/03	08/14/03	EPA 8270C	
37D-SB01-10 (P308004-05) Soil	Sampled: 07/29/	03 10:46	Received	07/29/0	3 17:05					
No TICs found	ND		300	ug/kg	1	3080047	08/05/03	08/14/03	EPA 8270C	
37D-SB01-15E (P308004-06) Wa	nter Sampled: 07	7/29/03 11	1:00 Recei	ved: 07/	/29/03 17:05	5				
No TICs found	ND		10	ug/l	1	3080056	08/05/03	08/13/03	EPA 8270C	
37D-SB01-15 (P308004-07) Soil	Sampled: 07/29/	03 11:11	Received	07/29/0	3 17:05					
No TICs found	ND		300	ug/kg	1	3080047	08/05/03	08/14/03	EPA 8270C	
37D-SB01-20 (P308004-08) Soil	Sampled: 07/29/	03 11:32	Received	07/29/0	3 17:05					
No TICs found	ND		300	ug/kg	1	3080047	08/05/03	08/14/03	EPA 8270C	
37D-SB01-25 (P308004-09) Soil	Sampled: 07/29/	03 11:56	Received	07/29/0	3 17:05					
No TICs found	ND		300	ug/kg	1	3080047	08/05/03	08/14/03	EPA 8270C	·
37D-SB01-30 (P308004-10) Soil	Sampled: 07/29/	03 12:17	Received	07/29/0	3 17:05					
No TICs found	ND		300	ug/kg	1	3080047	08/05/03	08/13/03	EPA 8270C	





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### Tentatively Identified Compounds by GC/MS Sequoia Analytical - Petaluma

Analyte	Result MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
37D-SB01-30D (P308004-11) Soi	Sampled: 07/29/03 12	17 Receive	ed: 07/29	/03 17:05					
No TICs found	ND	300	ug/kg	1	3080047	08/05/03	08/14/03	EPA 8270C	
37D-SB01-35 (P308004-12) Soil	Sampled: 07/29/03 12:4	0 Received	: 07/29/0	3 17:05					
No TICs found	ND	300	ug/kg	1	3080047	08/05/03	08/14/03	EPA 8270C	
37D-SB01-40 (P308004-13) Soil	Sampled: 07/29/03 13:1	2 Received	: 07/29/0	3 17:05					
No TICs found	ND	300	ug/kg	1	3080047	08/05/03	08/14/03	EPA 8270C	_



Project: Aerojet RI/FS
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### Semivolatile Organic Compounds by EPA Method 8270C Sequoia Analytical - Petaluma

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
35D-SB26-20 (P308004-01) Soil	Sampled: 07/28	3/03 16:15	Received:	07/29/03	17:05					
Acenaphthene	ND	8.7	330	ug/kg	1	3080047	08/05/03	08/13/03	EPA 8270C	
Acenaphthylene	ND	7.6	330	"	"	"	"	"	"	
Anthracene	ND	14	330	"	"	"	"	"	"	
Azobenzene	ND	20	330	"	"	"	"	"	"	
Benzidine	ND	1700	1700	"	"	"	"	"	"	
Benzoic acid	ND	2.7	1700	"	"	"	"	"	"	
Benzo (a) anthracene	ND	7.6	330	"	"	"	"	"	"	
Benzo (b+k) fluoranthene (total)	ND	13	330	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	8.8	330	"	"	"	"	"	"	
Benzo (a) pyrene	ND	10	330	"	"	"	"	"	"	
Benzyl alcohol	ND	11	660	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	9.1	330	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	15	330	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	16	330	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	38	9.3	330	"	"	"	"	"	"	j
4-Bromophenyl phenyl ether	ND	13	330	"	"	"	"	"	"	
Butyl benzyl phthalate	ND	11	330	"	"	"	"	"	"	
4-Chloroaniline	ND	58	660	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	11	660	"	"	"	"	"	"	
2-Chloronaphthalene	ND	9.9	330	"	"	"	"	"	"	
2-Chlorophenol	ND	16	330	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	13	330	"	"	"	"	"	"	
Chrysene	ND	11	330	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	18	330	"	"	"	"	"	"	
Dibenzofuran	ND	9.6	330	"	"	"	"	"	"	
Di-n-butyl phthalate	ND	12	330	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	16	330	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	14	330	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	15	330	"	"	"	"	"	"	
3,3´-Dichlorobenzidine	ND	44	660	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	15	330	"	"	"	"	"	"	
Diethyl phthalate	ND	14	330	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	36	330	"	"	"	"	"	"	
Dimethyl phthalate	ND	11	330	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	17	1700		"	"	"	"	"	
2,4-Dinitrophenol	ND	10	1700		"	"	"	"	"	
2,4-Dinitrotoluene	ND	20	330	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	13	330	,,	"	,,	,,	,,	"	

Sequoia Analytical - Petaluma



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Project Number: N/A
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Display	Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Fluoranthene ND 11 330 " " " " " " " " Fluorene ND 7.9 330 " " " " " " " " " " " " " Fluorene ND 7.9 330 " " " " " " " " " " " " " " " " " "	35D-SB26-20 (P308004-01) Soil	Sampled: 07/28	8/03 16:15	Received:	07/29/03	3 17:05					
Fluorene	Di-n-octyl phthalate										
Hexachlorobenzene ND 15 330 " " " " " " " " " " " " " " " " " "	Fluoranthene	ND		330			"				
Hexachlorobutadiene   ND		ND					"			"	
Hexachlorocyclopentadiene ND 10 330 " " " " " " " " " " " " " " " " "			15							"	
Hexachloroethane											
Indeno (1,2,3-cd) pyrene   ND					"	"	"	"	"	"	
Isophorone			17		"	"	"	"	"	"	
Solution   No.   14   Solution   No.   N	Indeno (1,2,3-cd) pyrene	ND	11	330	"	"	"	"	"	"	
2-Methylphenol ND 16 330 " " " " " " " " " " " " " " " " " "	Isophorone	ND	14	330	"	"	"	"	"	"	
4-Methylphenol         ND         11         330         "			10		"		"			"	
Anythialene	2-Methylphenol	ND	16	330	"	"	"	"	"	"	
2-Nitroaniline	4-Methylphenol	ND	11	330	"	"	"	"	"	"	
2-Nitroaniline	Naphthalene	ND	13	330	"	"	"	"	"	"	
4-Nitroaniline ND 22 1700 " " " " " " " " " " " " " " " " " "	2-Nitroaniline	ND	17		"	"	"	"	"	"	
Nitrobenzene ND 16 330 " " " " " " " " " " " " " " " " " "	3-Nitroaniline	ND			"	"	"	"	"	"	
Note	4-Nitroaniline	ND	22	1700	"	"	"	"	"	"	
2-Intophenol ND 23 1700 " " " " " " " " " " " " " N-Nitrosodimethylamine ND 16 330 " " " " " " " " " " " " " " " " " "	Nitrobenzene	ND	16	330	"	"	"	"	"	"	
N-Nitrosodimethylamine ND 16 330 """"""""""""""""""""""""""""""""""	2-Nitrophenol				"	"	"	"	"	"	
N-Nitrosodiphenylamine ND 17 330 " " " " " " " " " " " " " " " " " "	4-Nitrophenol	ND	23	1700	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine ND 15 330 " " " " " " " " " " " " " " " " " "	N-Nitrosodimethylamine	ND	16	330	"	"	"	"	"	"	
Pentachlorophenol         ND         12         1700         "	N-Nitrosodiphenylamine	ND	17	330	"	"	"	"	"	"	
Phenanthrene         ND         14         330         "	N-Nitrosodi-n-propylamine	ND		330	"	"	"	"	"	"	
Phenol         ND         12         330         "	Pentachlorophenol	ND	12	1700	"	"	"	"	"	"	
Pyrene         ND         12         330         "	Phenanthrene	ND	14	330	"	"	"	"	"	"	
1,2,4-Trichlorobenzene       ND       15       330       "	Phenol	ND	12	330	"	"	"	"	"	"	
2,4,5-Trichlorophenol       ND       14       330       "<	Pyrene	ND	12	330	"	"	"	"	"	"	
2,4,6-Trichlorophenol       ND       9.4       330       "	1,2,4-Trichlorobenzene	ND	15	330	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol       70 %       11-120       " " " " "         Surrogate: Phenol-d6       78 %       16-130       " " " " "         Surrogate: Nitrobenzene-d5       82 %       16-126       " " " " " "         Surrogate: 2-Fluorobiphenyl       84 %       28-134       " " " " " "         Surrogate: 2,4,6-Tribromophenol       89 %       51-144       " " " " " "	2,4,5-Trichlorophenol	ND	14	330	"	"	"	"	"	"	
Surrogate: Phenol-d6       78 %       16-130       " " " " " "         Surrogate: Nitrobenzene-d5       82 %       16-126       " " " " " "         Surrogate: 2-Fluorobiphenyl       84 %       28-134       " " " " " "         Surrogate: 2,4,6-Tribromophenol       89 %       51-144       " " " " " " "	2,4,6-Trichlorophenol	ND	9.4	330	"	"	"	"	"	"	
Surrogate: Nitrobenzene-d5       82 %       16-126       " " " " " " "         Surrogate: 2-Fluorobiphenyl       84 %       28-134       " " " " " " "         Surrogate: 2,4,6-Tribromophenol       89 %       51-144       " " " " " " "	Surrogate: 2-Fluorophenol						"	"	"	"	
Surrogate: 2-Fluorobiphenyl       84 %       28-134       " " " " "         Surrogate: 2,4,6-Tribromophenol       89 %       51-144       " " " " "	Surrogate: Phenol-d6		78 %	16-13	30		"	"	"	"	
Surrogate: 2,4,6-Tribromophenol 89 % 51-144 " " " "	Surrogate: Nitrobenzene-d5		82 %	16-12	26		"	"	"	"	
Surrogate: 2,4,6-Tribromophenol 89 % 51-144 " " " "	Surrogate: 2-Fluorobiphenyl		84 %	28-13	34		"	"	"	"	
	Surrogate: 2,4,6-Tribromophenol		89 %	51-14	14		"	"	"	"	
	Surrogate: Terphenyl-d14		108 %	64-11	19		"	"	"	"	



Project: Aerojet RI/FS
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Project Manager: Bruce Lewis

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### Semivolatile Organic Compounds by EPA Method 8270C Sequoia Analytical - Petaluma

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
35D-SB26-25 (P308004-02) Soil	Sampled: 07/28	3/03 16:42	Received:	07/29/03	17:05					
Acenaphthene	ND	8.7	330	ug/kg	1	3080047	08/05/03	08/13/03	EPA 8270C	
Acenaphthylene	ND	7.6	330	"	"	"	"	"	"	
Anthracene	ND	14	330	"	"	"	"	"	"	
Azobenzene	ND	20	330	"	"	"	"	"	"	
Benzidine	ND	1700	1700	"	"	"	"	"	"	
Benzoic acid	ND	2.7	1700	"	"	"	"	"	"	
Benzo (a) anthracene	ND	7.6	330	"	"	"	"	"	"	
Benzo (b+k) fluoranthene (total)	ND	13	330	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	8.8	330	"	"	"	"	"	"	
Benzo (a) pyrene	ND	10	330	"	"	"	"	"	"	
Benzyl alcohol	ND	11	660	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	9.1	330	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	15	330	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	16	330	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	ND	9.3	330	"	"	"	"	"	"	
4-Bromophenyl phenyl ether	ND	13	330	"	"	"	"	"	"	
Butyl benzyl phthalate	ND	11	330	"	"	"	"	"	"	
4-Chloroaniline	ND	58	660	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	11	660	"	"	"	"	"	"	
2-Chloronaphthalene	ND	9.9	330	"	"	"	"	"	"	
2-Chlorophenol	ND	16	330	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	13	330	"	"	"	"	"	"	
Chrysene	ND	11	330	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	18	330	"	"	"	"	"	"	
Dibenzofuran	ND	9.6	330	"	"	"	"	"	"	
Di-n-butyl phthalate	ND	12	330	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	16	330	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	14	330	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	15	330	"	"	"	"	"	"	
3,3´-Dichlorobenzidine	ND	44	660	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	15	330	"	"	"	"	"	"	
Diethyl phthalate	ND	14	330	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	36	330	"	"	"	"	"	"	
Dimethyl phthalate	ND	11	330	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	17	1700	"	"	"	"	"	"	
2,4-Dinitrophenol	ND	10	1700	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	20	330	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	13	330	"	"	"	"	"	"	
2,0-Dimuototuelle	ND	13	330		•					

Sequoia Analytical - Petaluma



Project: Aerojet RI/FS
Project Number: N/A
Project Manager: Bruce Lewis

P308004 **Reported:** 08/19/03 16:23

Di-n-octyl phthalate	Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Fluoranthene   ND	35D-SB26-25 (P308004-02) Soil	Sampled: 07/2	8/03 16:42	Received:	07/29/03	17:05					
Fluorene	Di-n-octyl phthalate						3080047			EPA 8270C	
Hexachlorobenzene   ND	Fluoranthene	ND		330							
Hexachlorobutadiene   ND		ND					"			"	
Hexachlorocyclopentadiene			15							"	
Hexachloroethane											
Indeno (1,2,3-cd) pyrene   ND					"	"	"	"	"	"	
Isophorone			17		"	"	"	"	"	"	
Surrogate: 2-Fluorophenol   ND   14   330	Indeno (1,2,3-cd) pyrene	ND	11	330	"	"	"	"	"	"	
2-Methylphenol ND 16 330 " " " " " " " " " " " " " " " " " "	Isophorone	ND	14	330	"	"	"	"	"	"	
4-Methylphenol ND 11 330 " " " " " " " " " " " " " " " " " "			10		"		"			"	
Analytical end   ND	2-Methylphenol	ND	16	330	"	"	"	"	"	"	
2-Nitroaniline	4-Methylphenol	ND	11	330	"	"	"	"	"	"	
2-Nitroaniline	Naphthalene	ND	13	330	"	"	"	"	"	"	
4-Nitroaniline ND 22 1700 " " " " " " " " " " " " " " " " " "	2-Nitroaniline	ND	17		"	"	"	"	"	"	
Nitrobenzene ND 16 330 " " " " " " " " " " " " " " " " " "	3-Nitroaniline	ND			"	"	"	"	"	"	
No	4-Nitroaniline	ND	22	1700	"	"	"	"	"	"	
2-Nitrophenol ND 23 1700 " " " " " " " " " " " " " " " " " "	Nitrobenzene	ND	16	330	"	"	"	"	"	"	
N-Nitrosodimethylamine ND 16 330 """"""""""""""""""""""""""""""""""	2-Nitrophenol				"	"	"	"	"	"	
N-Nitrosodiphenylamine ND 17 330 " " " " " " " " " " " " " " " " " "	4-Nitrophenol	ND	23	1700	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine ND 15 330 " " " " " " " " " " " " " " " " " "	N-Nitrosodimethylamine	ND	16	330	"	"	"	"	"	"	
Pentachlorophenol         ND         12         1700         "	N-Nitrosodiphenylamine	ND	17	330	"	"	"	"	"	"	
Phenanthrene         ND         14         330         "	N-Nitrosodi-n-propylamine	ND		330	"	"	"	"	"	"	
Phenol         ND         12         330         "	Pentachlorophenol	ND	12	1700	"	"	"	"	"	"	
Pyrene         ND         12         330         "	Phenanthrene	ND	14	330	"	"	"	"	"	"	
1,2,4-Trichlorobenzene       ND       15       330       "	Phenol	ND	12	330	"	"	"	"	"	"	
2,4,5-Trichlorophenol       ND       14       330       "<	Pyrene	ND	12	330	"	"	"	"	"	"	
2,4,6-Trichlorophenol       ND       9.4       330       "	1,2,4-Trichlorobenzene	ND	15	330	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol       70 %       11-120       " " " " "         Surrogate: Phenol-d6       79 %       16-130       " " " " "         Surrogate: Nitrobenzene-d5       84 %       16-126       " " " " "         Surrogate: 2-Fluorobiphenyl       82 %       28-134       " " " " " "         Surrogate: 2,4,6-Tribromophenol       84 %       51-144       " " " " "	2,4,5-Trichlorophenol	ND	14	330	"	"	"	"	"	"	
Surrogate: Phenol-d6       79 %       16-130       " " " " " "         Surrogate: Nitrobenzene-d5       84 %       16-126       " " " " " "         Surrogate: 2-Fluorobiphenyl       82 %       28-134       " " " " " "         Surrogate: 2,4,6-Tribromophenol       84 %       51-144       " " " " " "	2,4,6-Trichlorophenol	ND	9.4	330	"	"	"	"	"	"	
Surrogate: Nitrobenzene-d5       84 %       16-126       " " " " " "         Surrogate: 2-Fluorobiphenyl       82 %       28-134       " " " " " "         Surrogate: 2,4,6-Tribromophenol       84 %       51-144       " " " " " "	Surrogate: 2-Fluorophenol		70 %	11-12	20		"	"	"	"	
Surrogate: 2-Fluorobiphenyl       82 %       28-134       " " " " "         Surrogate: 2,4,6-Tribromophenol       84 %       51-144       " " " " "	Surrogate: Phenol-d6		79 %	16-13	80		"	"	"	"	
Surrogate: 2,4,6-Tribromophenol 84 % 51-144 " " " "	Surrogate: Nitrobenzene-d5		84 %	16-12	26		"	"	"	"	
Surrogate: 2,4,6-Tribromophenol 84 % 51-144 " " " "	Surrogate: 2-Fluorobiphenyl		82 %	28-13	34		"	"	"	"	
•							"	"	"	"	
	Surrogate: Terphenyl-d14			64-11	19		"	"	"	"	



Project: Aerojet RI/FS
Project Number: N/A
Project Manager: Bruce Lewis

P308004 **Reported:** 08/19/03 16:23

### Semivolatile Organic Compounds by EPA Method 8270C Sequoia Analytical - Petaluma

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
37D-SB01-6 (P308004-04) Soil	Sampled: 07/29/	/03 10:39	Received:	07/29/03	17:05					
Acenaphthene	ND	8.7	330	ug/kg	1	3080047	08/05/03	08/14/03	EPA 8270C	
Acenaphthylene	ND	7.6	330	"	"	"	"	"	"	
Anthracene	ND	14	330	"	"	"	"	"	"	
Azobenzene	ND	20	330	"	"	"	"	"	"	
Benzidine	ND	1700	1700	"	"	"	"	"	"	
Benzoic acid	ND	2.7	1700	"	"	"	"	"	"	
Benzo (a) anthracene	ND	7.6	330	"	"	"	"	"	"	
Benzo (b+k) fluoranthene (total)	ND	13	330	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	8.8	330	"	"	"	"	"	"	
Benzo (a) pyrene	ND	10	330	"	"	"	"	"	"	
Benzyl alcohol	ND	11	660	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	9.1	330	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	15	330	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	16	330	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	ND	9.3	330	"	"	"	"	"	"	
4-Bromophenyl phenyl ether	ND	13	330	"	"	"	"	"	"	
Butyl benzyl phthalate	ND	11	330	"	"	"	"	"	"	
4-Chloroaniline	ND	58	660	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	11	660	"	"	"	"	"	"	
2-Chloronaphthalene	ND	9.9	330	"	"	"	"	"	"	
2-Chlorophenol	ND	16	330	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	13	330	"	"	"	"	"	"	
Chrysene	ND	11	330	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	18	330	"	"	"	"	"	"	
Dibenzofuran	ND	9.6	330	"	"	"	"	"	"	
Di-n-butyl phthalate	ND	12	330	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	16	330	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	14	330	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	15	330	"	"	"	"	"	"	
3,3´-Dichlorobenzidine	ND	44	660	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	15	330	"	"	"	"	"	"	
Diethyl phthalate	ND	14	330	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	36	330	"	"	"	"	"	"	
Dimethyl phthalate	ND ND	11	330	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND ND	17	1700	"	"	"	"	"	"	
2,4-Dinitrophenol	ND ND	10	1700	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND ND	20	330	"	"	,,	,,	"	"	
2,6-Dinitrotoluene	ND ND	13	330	,,	"	"	"	"	"	
2,0-Dimitiotoruene	ND	13	330							

Sequoia Analytical - Petaluma



Project: Aerojet RI/FS
Project Number: N/A
Project Manager: Bruce Lewis

P308004 **Reported:** 08/19/03 16:23

Sampled: 07/29/03 10:39   Received: 07/29/03 17:05   Received: 07/29/03 1	Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Fluoranthene         ND         11         330         """"""""""""""""""""""""""""""""""""	37D-SB01-6 (P308004-04) Soil	Sampled: 07/29	/03 10:39	Received:	07/29/03	17:05					
Fluorene ND 7.9 330 " " " " " " " " " " " " " " " " " "											
Hexachlorobenzene ND 15 330 " " " " " " " " " " " " " " " " " "	Fluoranthene	ND		330			"				
Hexachlorobutadiene   ND   17   330   "		ND					"			"	
Hexachlorocyclopentadiene ND 10 330 """"""""""""""""""""""""""""""""			15							"	
Hexachloroethane											
Indeno (1,2,3-cd) pyrene         ND         11         330         """"""""""""""""""""""""""""""""""""					"	"	"	"	"	"	
Isophorone			17		"	"	"	"	"	"	
2-Methylnaphthalene ND 10 330 " " " " " " " " " " " " " " " " "	Indeno (1,2,3-cd) pyrene	ND	11	330	"	"	"	"	"	"	
2-Methylphenol         ND         16         330         "	•	ND	14	330	"	"	"	"	"	"	
4-Methylphenol         ND         11         330         "			10		"	"	"	"	"	"	
Naphthalene ND 13 330 " " " " " " " " " " " " " " " " "	2-Methylphenol	ND	16	330	"	"	"	"	"	"	
2-Nitroaniline       ND       17       1700       "	4-Methylphenol	ND	11	330	"	"	"	"	"	"	
3-Nitroaniline ND 18 1700 " " " " " " " " " 4-Nitroaniline ND 22 1700 " " " " " " " " " " " " " " 1 Nitrobenzene ND 16 330 " " " " " " " " " " " " " " " 1 N-Nitrosodimethylamine ND 16 330 " " " " " " " " " " " " " " " " N-Nitrosodi-n-propylamine ND 15 330 " " " " " " " " " " " " " " " " " "	Naphthalene	ND	13	330	"	"	"	"	"	"	
4-Nitroaniline       ND       22       1700       "		ND	17		"	"	"	"	"	"	
Nitrobenzene         ND         16         330         "	3-Nitroaniline	ND			"	"	"	"	"	"	
2-Nitrophenol ND 14 330 " " " " " " " " " 4-Nitrophenol ND 23 1700 " " " " " " " " " " " " " N-Nitrosodimethylamine ND 16 330 " " " " " " " " " " " " " " N-Nitrosodi-n-propylamine ND 15 330 " " " " " " " " " " " " " " " " " "	4-Nitroaniline	ND	22	1700	"	"	"	"	"	"	
4-Nitrophenol ND 23 1700 " " " " " " " " " " " N-Nitrosodimethylamine ND 16 330 " " " " " " " " " " " " " N-Nitrosodiphenylamine ND 17 330 " " " " " " " " " " " " " " " " " "	Nitrobenzene	ND	16	330	"	"	"	"	"	"	
N-Nitrosodimethylamine         ND         16         330         " </td <td>2-Nitrophenol</td> <td></td> <td></td> <td></td> <td>"</td> <td>"</td> <td>"</td> <td>"</td> <td>"</td> <td>"</td> <td></td>	2-Nitrophenol				"	"	"	"	"	"	
N-Nitrosodiphenylamine ND 17 330 " " " " " " " " " " N-Nitrosodi-n-propylamine ND 15 330 " " " " " " " " " "		ND	23	1700	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine ND 15 330 " " " " " " "	N-Nitrosodimethylamine	ND	16	330	"	"	"	"	"	"	
	N-Nitrosodiphenylamine	ND	17	330	"	"	"	"	"	"	
Pentachlorophenol ND 12 1700 " " " " " " "	N-Nitrosodi-n-propylamine	ND		330	"	"	"	"	"	"	
100 $12$ $1700$	Pentachlorophenol	ND	12	1700	"	"	"	"	"	"	
Phenanthrene ND 14 330 " " " " " " "	Phenanthrene	ND	14	330	"	"	"	"	"	"	
Phenol ND 12 330 " " " " " "	Phenol	ND	12	330	"	"	"	"	"	"	
Pyrene ND 12 330 " " " " " "	Pyrene	ND	12	330	"	"	"	"	"	"	
1,2,4-Trichlorobenzene ND 15 330 " " " " " " "	1,2,4-Trichlorobenzene	ND	15	330	"	"	"	"	"	"	
2,4,5-Trichlorophenol ND 14 330 " " " " " " "	2,4,5-Trichlorophenol	ND	14	330	"	"	"	"	"	"	
2,4,6-Trichlorophenol ND 9.4 330 " " " " " " "	2,4,6-Trichlorophenol	ND	9.4	330	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol 64 % 11-120 " " " "	Surrogate: 2-Fluorophenol		64 %	11-12	20		"	"	"	"	
Surrogate: Phenol-d6 73 % 16-130 " " " "	Surrogate: Phenol-d6		73 %	16-13	30		"	"	"	"	
Surrogate: Nitrobenzene-d5 74 % 16-126 " " " "	Surrogate: Nitrobenzene-d5		74 %	16-12	26		"	"	"	"	
Surrogate: 2-Fluorobiphenyl 76 % 28-134 " " " "	Surrogate: 2-Fluorobiphenyl		76 %	28-13	34		"	"	"	"	
Surrogate: 2,4,6-Tribromophenol 83 % 51-144 " " " "			83 %	51-14	14		"	"	"	"	
Surrogate: Terphenyl-d14 108 % 64-119 " " " " "	_			64-11	19		"	"	"	"	



Project: Aerojet RI/FS
Project Number: N/A
Project Manager: Bruce Lewis

P308004 **Reported:** 08/19/03 16:23

### Semivolatile Organic Compounds by EPA Method 8270C Sequoia Analytical - Petaluma

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
37D-SB01-10 (P308004-05) Soil	Sampled: 07/29	0/03 10:46	Received:	07/29/03	17:05					
Acenaphthene	ND	8.7	330	ug/kg	1	3080047	08/05/03	08/14/03	EPA 8270C	
Acenaphthylene	ND	7.6	330	"	"	"	"	"	"	
Anthracene	ND	14	330	"	"	"	"	"	"	
Azobenzene	ND	20	330	"	"	"	"	"	"	
Benzidine	ND	1700	1700	"	"	"	"	"	"	
Benzoic acid	ND	2.7	1700	"	"	"	"	"	"	
Benzo (a) anthracene	ND	7.6	330	"	"	"	"	"	"	
Benzo (b+k) fluoranthene (total)	ND	13	330	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	8.8	330	"	"	"	"	"	"	
Benzo (a) pyrene	ND	10	330	"	"	"	"	"	"	
Benzyl alcohol	ND	11	660	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	9.1	330	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	15	330	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	16	330	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	ND	9.3	330	"	"	"	"	"	"	
4-Bromophenyl phenyl ether	ND	13	330	"	"	"	"	"	"	
Butyl benzyl phthalate	ND	11	330	"	"	"	"	"	"	
4-Chloroaniline	ND	58	660	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	11	660	"	"	"	"	"	"	
2-Chloronaphthalene	ND	9.9	330	"	"	"	"	"	"	
2-Chlorophenol	ND	16	330	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	13	330	"	"	"	"	"	"	
Chrysene	ND	11	330	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	18	330	"	"	"	"	"	"	
Dibenzofuran	ND	9.6	330	"	"	"	"	"	"	
Di-n-butyl phthalate	ND	12	330	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	16	330	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	14	330	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	15	330	"	"	"	"	"	"	
3,3´-Dichlorobenzidine	ND	44	660	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	15	330	"	"	"	"	"	"	
Diethyl phthalate	ND	14	330	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	36	330	"	"	"	"	"	"	
Dimethyl phthalate	ND	11	330	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	17	1700	"	"	"	"	"	"	
2,4-Dinitrophenol	ND	10	1700	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	20	330	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	13	330	"	"	"	"	"	"	

Sequoia Analytical - Petaluma



Project: Aerojet RI/FS
Project Number: N/A
Project Manager: Bruce Lewis

P308004 **Reported:** 08/19/03 16:23

STD-SB01-10 (P308004-05)	Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Fluoranthene   ND	37D-SB01-10 (P308004-05) Soil	Sampled: 07/29	9/03 10:46	Received:	07/29/03	3 17:05					
Fluorene   ND   7-9   330   "							3080047			EPA 8270C	
Hexachlorobenzene ND 15 330 " " " " " " " " " " " " Hexachlorobutadiene ND 17 330 " " " " " " " " " " " " " " " " " "	Fluoranthene	ND		330							
Hexachlorobutadiene   ND   17   330   "   "   "   "   "   "   "   Hexachlorocyclopentadiene   ND   10   330   "   "   "   "   "   "   "   "   "		ND					"			"	
Hexachlorocyclopentadiene   ND   10   330   " " " " " " " " " "   "   "   "   "			15							"	
Hexachlorochname											
Indeno (1,2,3-cd) pyrene   ND					"	"	"	"	"	"	
Isophorone			17		"	"	"	"	"	"	
Septembro   No.   10   330	Indeno (1,2,3-cd) pyrene	ND	11	330	"	"	"	"	"	"	
2-Methylphenol         ND         16         330         "	•	ND	14	330	"	"	"	"	"	"	
4-Methylphenol         ND         11         330         "					"	"	"	"	"	"	
Analythalene   ND   13   330	2-Methylphenol	ND	16	330	"	"	"	"	"	"	
2-Nitroaniline         ND         17         1700         "	4-Methylphenol	ND	11	330	"	"	"	"	"	"	
2-Introaniline  ND  18  1700  18  1700  18  1700  19  19  10  10  10  11  10  11  10  11  11	Naphthalene	ND	13	330	"	"	"	"	"	"	
4-Nitroaniline         ND         22         1700         "		ND	17		"	"	"	"	"	"	
Nitrobenzene         ND         16         330         "	3-Nitroaniline	ND			"	"	"	"	"	"	
2-Nitrophenol ND 14 330 " " " " " " " " " " " " " " " " " "	4-Nitroaniline	ND	22	1700	"	"	"	"	"	"	
4-Nitrophenol ND 23 1700 " " " " " " " " " " " " " " " " " "	Nitrobenzene	ND	16	330	"	"	"	"	"	"	
N-Nitrosodimethylamine ND 16 330 " " " " " " " " " " " " " " " " " "	2-Nitrophenol				"	"	"	"	"	"	
N-Nitrosodiphenylamine         ND         17         330         " </td <td></td> <td>ND</td> <td>23</td> <td>1700</td> <td>"</td> <td>"</td> <td>"</td> <td>"</td> <td>"</td> <td>"</td> <td></td>		ND	23	1700	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine         ND         15         330         "	N-Nitrosodimethylamine	ND	16	330	"	"	"	"	"	"	
Pentachlorophenol         ND         12         1700         "	N-Nitrosodiphenylamine	ND	17	330	"	"	"	"	"	"	
Phenanthrene         ND         14         330         "	N-Nitrosodi-n-propylamine	ND		330	"	"	"	"	"	"	
Phenol         ND         12         330         "	Pentachlorophenol	ND	12	1700	"	"	"	"	"	"	
Pyrene         ND         12         330         "	Phenanthrene	ND	14	330	"	"	"	"	"	"	
1,2,4-Trichlorobenzene       ND       15       330       "	Phenol	ND	12	330	"	"	"	"	"	"	
2,4,5-Trichlorophenol       ND       14       330       "<	Pyrene	ND	12	330	"	"	"	"	"	"	
2,4,6-Trichlorophenol       ND       9.4       330       "	1,2,4-Trichlorobenzene	ND	15	330	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol         65 %         11-120         " " " " "           Surrogate: Phenol-d6         71 %         16-130         " " " " "           Surrogate: Nitrobenzene-d5         75 %         16-126         " " " " "	2,4,5-Trichlorophenol	ND	14	330	"	"	"	"	"	"	
Surrogate: Phenol-d6       71 %       16-130       " " " " " "         Surrogate: Nitrobenzene-d5       75 %       16-126       " " " " " "	2,4,6-Trichlorophenol	ND	9.4	330	"	"	"	"	"	"	
Surrogate: Nitrobenzene-d5 75 % 16-126 " " " " "	Surrogate: 2-Fluorophenol		65 %	11-12	20		"	"	"	"	
	Surrogate: Phenol-d6		71 %	16-13	30		"	"	"	"	
Surrogate: 2-Fluorobiphenyl 77 % 28-134 " " " " "	Surrogate: Nitrobenzene-d5		75 %	16-12	26		"	"	"	"	
• •	Surrogate: 2-Fluorobiphenyl		77 %	28-13	34		"	"	"	"	
Surrogate: 2,4,6-Tribromophenol 76 % 51-144 " " " "							"	"	"	"	
Surrogate: Terphenyl-d14 99 % 64-119 " " " " "				64-11	19		"	"	"	"	



Project: Aerojet RI/FS
Project Number: N/A
Project Manager: Bruce Lewis

P308004 **Reported:** 08/19/03 16:23

### Semivolatile Organic Compounds by EPA Method 8270C Sequoia Analytical - Petaluma

Analyte	Result	Re <sub>l</sub> MDL	oorting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
37D-SB01-15E (P308004-06) Water	Sampled:	07/29/03 11:00	Recei	ved: 07/2	29/03 17:05					
Acenaphthene	ND	1.2	10	ug/l	1	3080056	08/05/03	08/13/03	EPA 8270C	
Acenaphthylene	ND	1.4	10	"	"	"	"	"	"	
Anthracene	ND	0.60	10	"	"	"	"	"	"	
Azobenzene	ND	0.63	20	"	"	"	"	"	"	
Benzidine	ND	3.2	50	"	"	"	"	"	"	
Benzoic acid	ND	3.9	50	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.44	10	"	"	"	"	"	"	
Benzo (b+k) fluoranthene (total)	ND	1.1	10	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	0.64	10	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.87	10	"	"	"	"	"	"	
Benzyl alcohol	ND	3.9	20	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	1.1	10	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	1.5	10	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	1.5	10	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	3.8	2.8	10	"	"	"	"	"	"	
4-Bromophenyl phenyl ether	ND	0.70	10	"	"	"	"	"	"	
Butyl benzyl phthalate	ND	2.7	10	"	"	"	"	"	"	
4-Chloroaniline	ND	0.55	20	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	2.3	20	"	"	"	"	"	"	
2-Chloronaphthalene	ND	1.4	10	"	"	"	"	"	"	
2-Chlorophenol	ND	0.31	10	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	0.97	10	"	"	"	"	"	"	
Chrysene	ND	0.45	10	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.55	10	"	"	"	"	"	"	
Dibenzofuran	ND	1.1	10	"	"	"	"	"	"	
Di-n-butyl phthalate	ND	1.1	10	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.8	10	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.8	10	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.8	10	"	"	"	"	"	"	
3,3´-Dichlorobenzidine	ND	2.9	20	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	0.47	10	"	"	"	"	"	"	
Diethyl phthalate	ND	0.42	10		"	"	"	"	"	
2,4-Dimethylphenol	ND	1.4	10		"	"	"	"	"	
Dimethyl phthalate	ND	0.56	10		"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	3.4	50	,,	"	"	"	"	"	
2,4-Dinitrophenol	ND	2.3	50	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	0.82	10	"	"	"	,,	,,	"	
2,6-Dinitrotoluene	ND	0.76	10	,,	,,	"	,,	,,	"	

Sequoia Analytical - Petaluma



Project: Aerojet RI/FS
Project Number: N/A
Project Manager: Bruce Lewis

P308004 **Reported:** 08/19/03 16:23

### Semivolatile Organic Compounds by EPA Method 8270C Sequoia Analytical - Petaluma

Analyte	Result	Re <sub>j</sub> MDL	porting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
37D-SB01-15E (P308004-06) Water	Sampled:	07/29/03 11:00	Receiv	ved: 07/2	9/03 17:05	i				
Di-n-octyl phthalate	ND	0.81	10	ug/l	1	3080056	08/05/03	08/13/03	EPA 8270C	
Fluoranthene	ND	0.44	10	"	"	"	"	"	"	
Fluorene	ND	1.0	10	"	"	"	"	"	"	
Hexachlorobenzene	ND	0.79	10	"	"	"	"	"	"	
Hexachlorobutadiene	ND	1.5	10	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	0.31	10	"	"	"	"	"	"	
Hexachloroethane	ND	1.7	10	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.61	10	"	"	"	"	"	"	
Isophorone	ND	0.71	10	"	"	"	"	"	"	
2-Methylnaphthalene	ND	1.4	10	"	"	"	"	"	"	
2-Methylphenol	ND	3.4	10	"	"	"	"	"	"	
4-Methylphenol	ND	3.0	10	"	"	"	"	"	"	
Naphthalene	ND	1.6	10	"	"	"	"	"	"	
2-Nitroaniline	ND	0.69	50	"	"	"	"	"	"	
3-Nitroaniline	ND	0.54	50	"	"	"	"	"	"	
4-Nitroaniline	ND	0.61	50	"	"	"	"	"	"	
Nitrobenzene	ND	1.3	10	"	"	"	"	"	"	
2-Nitrophenol	ND	0.42	10	"	"	"	"	"	"	
4-Nitrophenol	ND	0.51	50	"	"	"	"	"	"	
N-Nitrosodimethylamine	ND	1.4	20	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	3.9	10	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine	ND	0.58	10	"	"	"	"	"	"	
Pentachlorophenol	ND	3.1	50	"	"	"	"	"	"	
Phenanthrene	ND	0.56	10	"	"	"	"	"	"	
Phenol	ND	0.48	10	"	"	"	"	"	"	
Pyrene	ND	0.28	10	"	"	"	"	"	"	
Pyridine	ND	3.8	10	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.7	10	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	0.61	10	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	0.31	10	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		63 %	15-10	3		"	"	"	"	
Surrogate: Phenol-d6		81 %	18-11	5		"	"	"	"	
Surrogate: Nitrobenzene-d5		95 %	39-10	3		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		98 %	40-12			"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		104 %	11-14			"	"	"	"	
Surrogate: Terphenyl-d14		120 %	56-13			,,	,,	"	"	
surrogate. Terpnenyt-a14		120 /0	30-13	7						

Sequoia Analytical - Petaluma



Project: Aerojet RI/FS
Project Number: N/A
Project Manager: Bruce Lewis

P308004 **Reported:** 08/19/03 16:23

### Semivolatile Organic Compounds by EPA Method 8270C Sequoia Analytical - Petaluma

37D-SB01-15 (P308004-07) Soil   Sampled: 07/29/03 11:05   Security   Received: 07/29/03 17:05   Security   Received: 07/29/03/03 17:05   Security   Received: 07/29/03/03 17:05   Security   Received: 07/29/03/03 17:05   Security   Received: 07/29/03/03/03 17:05   Security   Received: 07/29/03/03/03 17:05   Security   Received: 07/29/03/03/03 17:05   Security   Received: 07/29/03/03/03/03 17:05   Security   Received: 07/29/03/03/03/03/03/03/03/03/03/03/03/03/03/	Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthylene ND 7.6 330 " " " " " " " " " Anthracene ND 14 330 " " " " " " " " " " " " " " " " " "	37D-SB01-15 (P308004-07) Soil	Sampled: 07/29	)/03 11:11	Received:	07/29/03	3 17:05					
Anthracene ND 14 330 " " " " " " " " " " " " " " " " " "	•										
Azobenzene   ND   20   330   "	Acenaphthylene	ND	7.6	330	"	"	"	"	"	"	
Benzidine   ND   1700   1700   1700   1   1   1700   1   1   1700   1   1   1700   1   1   1700   1   1   1700   1   1   1700   1   1   1700   1   1   1700   1   1   1700   1   1   1700   1   1   1700   1   1   1700   1   1   1700   1   1   1700   1   1   1700   1   1   1700   1   1   1700   1   1   1   1700   1   1   1700   1   1   1700   1   1   1700   1   1   1   1   1   1   1   1   1	Anthracene	ND	14	330	"	"	"	"	"	"	
Benzoic acid   ND   2.7   1700   "   "   "   "   "   "   "   "   "	Azobenzene	ND	20	330	"	"	"	"	"	"	
Benzo (a) anthracene   ND	Benzidine	ND	1700	1700	"	"	"	"	"	"	
Benzo (b+k) fluoranthene (total)   ND   13   330   "   "   "   "   "   "   "   "   "	Benzoic acid	ND	2.7	1700	"	"	"	"	"	"	
Benzo (g,h.i) perylene         ND         8.8         330         """"""""""""""""""""""""""""""""""""	Benzo (a) anthracene	ND	7.6	330	"	"	"	"	"	"	
Benzo (a) pyrene   ND	. ,	ND		330	"	"	"	"	"	"	
Benzo (a) pyrene         ND         10         330         "	Benzo (g,h,i) perylene		8.8		"	"	"	"	"	"	
Bis(2-chloroethoxy)methane         ND         9.1         330         " <t< td=""><td></td><td>ND</td><td>10</td><td>330</td><td>"</td><td>"</td><td>"</td><td>"</td><td>"</td><td>"</td><td></td></t<>		ND	10	330	"	"	"	"	"	"	
Bis(2-chloroethylpether   ND   15   330   "   "   "   "   "   "   "   "   "	Benzyl alcohol	ND	11	660	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether   ND   16   330   "   "   "   "   "   "   "   "   "	Bis(2-chloroethoxy)methane	ND	9.1	330	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	Bis(2-chloroethyl)ether	ND	15	330	"	"	"	"	"	"	
4-Bromophenyl phenyl ether         ND         13         330         """"""""""""""""""""""""""""""""""""	Bis(2-chloroisopropyl)ether	ND			"	"	"	"	"	"	
4-Bromophenyl phenyl ether         ND         13         330         """"""""""""""""""""""""""""""""""""	Bis(2-ethylhexyl)phthalate	ND	9.3	330	"	"	"	"	"	"	
Butyl benzyl phthalate	4-Bromophenyl phenyl ether	ND	13	330	"	"	"	"	"	"	
4-Chloroaniline         ND         58         660         "		ND	11	330	"	"	"	"	"	"	
2-Chloronaphthalene         ND         9.9         330         " <td></td> <td>ND</td> <td>58</td> <td>660</td> <td>"</td> <td>"</td> <td>"</td> <td>"</td> <td>"</td> <td>"</td> <td></td>		ND	58	660	"	"	"	"	"	"	
2-Chlorophenol       ND       16       330       "	4-Chloro-3-methylphenol	ND	11	660	"	"	"	"	"	"	
2-Chlorophenol         ND         16         330         "	• •	ND	9.9	330	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether         ND         13         330         " <t< td=""><td>-</td><td>ND</td><td>16</td><td>330</td><td>"</td><td>"</td><td>"</td><td>"</td><td>"</td><td>"</td><td></td></t<>	-	ND	16	330	"	"	"	"	"	"	
Chrysene         ND         11         330         " <t< td=""><td>-</td><td>ND</td><td>13</td><td>330</td><td>"</td><td>"</td><td>"</td><td>"</td><td>"</td><td>"</td><td></td></t<>	-	ND	13	330	"	"	"	"	"	"	
Dibenz (a,h) anthracene         ND         18         330         """"""""""""""""""""""""""""""""""""		ND		330	"	"	"	"	"	"	
Di-n-butyl phthalate ND 12 330 " " " " " " " " " " " " " 1,2-Dichlorobenzene ND 16 330 " " " " " " " " " " " " " " " " " "	-	ND	18	330	"	"	"	"	"	"	
Di-n-butyl phthalate ND 12 330 " " " " " " " " " " " " " 1,2-Dichlorobenzene ND 16 330 " " " " " " " " " " " " " " " " " "	· / /	ND	9.6	330	"	"	"	"	"	"	
1,2-Dichlorobenzene         ND         16         330         "	Di-n-butyl phthalate	ND	12	330	"	"	"	"	"	"	
1,3-Dichlorobenzene       ND       14       330       " <td>• 1</td> <td>ND</td> <td>16</td> <td>330</td> <td>"</td> <td>"</td> <td>"</td> <td>"</td> <td>"</td> <td>"</td> <td></td>	• 1	ND	16	330	"	"	"	"	"	"	
1,4-Dichlorobenzene       ND       15       330       " <td>· ·</td> <td></td> <td></td> <td></td> <td>"</td> <td>"</td> <td>"</td> <td>"</td> <td>"</td> <td>"</td> <td></td>	· ·				"	"	"	"	"	"	
3,3′-Dichlorobenzidine       ND       44       660       "	<i>'</i>		15		"	"	"	"	"	"	
2,4-Dichlorophenol       ND       15       330       " <td>,</td> <td></td> <td></td> <td></td> <td>"</td> <td>"</td> <td>"</td> <td>"</td> <td>"</td> <td>"</td> <td></td>	,				"	"	"	"	"	"	
Diethyl phthalate         ND         14         330         "	*				"	"	"	"	"	"	
2,4-Dimethylphenol       ND       36       330       " <td></td> <td></td> <td></td> <td></td> <td>"</td> <td>"</td> <td>"</td> <td>"</td> <td>"</td> <td>"</td> <td></td>					"	"	"	"	"	"	
Dimethyl phthalate ND 11 330 " " " " " " " " 4,6-Dinitro-2-methylphenol ND 17 1700 " " " " " " " " " " 2,4-Dinitrophenol ND 10 1700 " " " " " " " " " " " " " " " " " "					"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol       ND       17       1700       "					"	"	"	"	"	"	
2,4-Dinitrophenol ND 10 1700 " " " " " " "					"	"	"	"	"	"	
•					"	"	"	"	"	"	
, ————————————————————————————————————	-				"	"	"	"	"	"	
2,6-Dinitrotoluene ND 13 330 " " " " " " " "					"	"	"	"	"	"	

Sequoia Analytical - Petaluma



Project: Aerojet RI/FS
Project Number: N/A
Project Manager: Bruce Lewis

P308004 **Reported:** 08/19/03 16:23

Dir-n-octyl phthalate	Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Fluoranthene   ND	37D-SB01-15 (P308004-07) Soil	Sampled: 07/29	9/03 11:11	Received:	07/29/03	3 17:05					
Fluorene   ND   7.9   330	Di-n-octyl phthalate										
Hexachlorobenzene ND 15 330 " " " " " " " " " " " " " " " " " "	Fluoranthene	ND		330							
Hexachlorobutadiene   ND	Fluorene	ND					"			"	
Hexachlorocyclopentadiene   ND   10   330   "			15							"	
Hexachlorocythandrine	Hexachlorobutadiene										
Indeno (1,2,3-cd) pyrene   ND	Hexachlorocyclopentadiene				"	"	"	"	"	"	
Surrogate: 2-Fluorophenol   ND   14   330   " " " " " " " " " " " " " " " " " "			17		"	"	"	"	"	"	
2-Methylnaphthalene	Indeno (1,2,3-cd) pyrene		11				"			"	
2-Methylphenol ND 16 330 " " " " " " " " " " " " " " " " " "	Isophorone	ND	14	330	"	"	"	"	"	"	
4-Methylphenol ND 11 330 " " " " " " " " " " " " " " " " " "			10		"	"	"	"	"	"	
A-Nethylphenol   ND	2-Methylphenol	ND	16	330	"	"	"	"	"	"	
2-Nitroaniline	4-Methylphenol	ND	11	330	"	"	"	"	"	"	
2-Nitroaniline	Naphthalene	ND	13	330	"	"	"	"	"	"	
4-Nitroaniline ND 22 1700 " " " " " " " " " " " " " " " " " "	2-Nitroaniline	ND	17		"	"	"	"	"	"	
Nitrobenzene	3-Nitroaniline	ND			"	"	"	"	"	"	
No	4-Nitroaniline	ND	22	1700	"	"	"	"	"	"	
2-Nitrosodimethylamine ND 16 330 " " " " " " " " " " " N-Nitrosodimethylamine ND 17 330 " " " " " " " " " " " " " " " " " "	Nitrobenzene	ND	16	330	"	"	"	"	"	"	
N-Nitrosodimethylamine ND 16 330 """"""""""""""""""""""""""""""""""	2-Nitrophenol				"	"	"	"	"	"	
N-Nitrosodiphenylamine ND 17 330 """"""""""""""""""""""""""""""""""	4-Nitrophenol	ND	23	1700	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine ND 15 330 """"""""""""""""""""""""""""""""""	N-Nitrosodimethylamine	ND	16	330	"	"	"	"	"	"	
Pentachlorophenol         ND         12         1700         "	N-Nitrosodiphenylamine	ND	17	330	"	"	"	"	"	"	
Phenanthrene         ND         14         330         "	N-Nitrosodi-n-propylamine	ND		330	"	"	"	"	"	"	
Phenol         ND         12         330         "	Pentachlorophenol	ND	12	1700	"	"	"	"	"	"	
Pyrene         ND         12         330         "	Phenanthrene	ND	14	330	"	"	"	"	"	"	
1,2,4-Trichlorobenzene       ND       15       330       "	Phenol	ND	12	330	"	"	"	"	"	"	
2,4,5-Trichlorophenol       ND       14       330       "<	Pyrene	ND	12	330	"	"	"	"	"	"	
2,4,6-Trichlorophenol       ND       9.4       330       "	1,2,4-Trichlorobenzene	ND	15	330	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol       64 %       11-120       " " " " "         Surrogate: Phenol-d6       73 %       16-130       " " " " "         Surrogate: Nitrobenzene-d5       77 %       16-126       " " " " " "         Surrogate: 2-Fluorobiphenyl       81 %       28-134       " " " " " "         Surrogate: 2,4,6-Tribromophenol       76 %       51-144       " " " " " "	2,4,5-Trichlorophenol	ND	14	330	"	"	"	"	"	"	
Surrogate: Phenol-d6       73 %       16-130       " " " " " "         Surrogate: Nitrobenzene-d5       77 %       16-126       " " " " " " "         Surrogate: 2-Fluorobiphenyl       81 %       28-134       " " " " " " " "         Surrogate: 2,4,6-Tribromophenol       76 %       51-144       " " " " " " "	2,4,6-Trichlorophenol	ND	9.4	330	"	"	"	"	"	"	
Surrogate: Nitrobenzene-d5       77 %       16-126       " " " " " "         Surrogate: 2-Fluorobiphenyl       81 %       28-134       " " " " " "         Surrogate: 2,4,6-Tribromophenol       76 %       51-144       " " " " " "	Surrogate: 2-Fluorophenol						"	"	"	"	
Surrogate: 2-Fluorobiphenyl       81 %       28-134       " " " " "         Surrogate: 2,4,6-Tribromophenol       76 %       51-144       " " " " " "	Surrogate: Phenol-d6		73 %	16-13	30		"	"	"	"	
Surrogate: 2,4,6-Tribromophenol 76 % 51-144 " " " " "	Surrogate: Nitrobenzene-d5		77 %	16-12	26		"	"	"	"	
Surrogate: 2,4,6-Tribromophenol 76 % 51-144 " " " "	Surrogate: 2-Fluorobiphenyl		81 %	28-13	34		"	"	"	"	
	Surrogate: 2,4,6-Tribromophenol		76 %	51-14	14		"	"	"	"	
	Surrogate: Terphenyl-d14		103 %	64-11	19		"	"	"	"	



Project: Aerojet RI/FS
Project Number: N/A
Project Manager: Bruce Lewis

P308004 **Reported:** 08/19/03 16:23

### Semivolatile Organic Compounds by EPA Method 8270C Sequoia Analytical - Petaluma

				-						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
37D-SB01-20 (P308004-08) Soil	Sampled: 07/29	9/03 11:32	Received	: 07/29/03	3 17:05					
Acenaphthene	ND	8.7	330	ug/kg	1	3080047	08/05/03	08/14/03	EPA 8270C	
Acenaphthylene	ND	7.6	330	"	"	"	"	"	"	
Anthracene	ND	14	330	"	"	"	"	"	"	
Azobenzene	ND	20	330	"	"	"	"	"	"	
Benzidine	ND	1700	1700	"	"	"	"	"	"	
Benzoic acid	ND	2.7	1700	"	"	"	"	"	"	
Benzo (a) anthracene	ND	7.6	330	"	"	"	"	"	"	
Benzo (b+k) fluoranthene (total)	ND	13	330	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	8.8	330	"	"	"	"	"	"	
Benzo (a) pyrene	ND	10	330	"	"	"	"	"	"	
Benzyl alcohol	ND	11	660	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	9.1	330	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	15	330	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	16	330	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	ND	9.3	330	"	"	"	"	"	"	
4-Bromophenyl phenyl ether	ND	13	330	"	"	"	"	"	"	
Butyl benzyl phthalate	ND	11	330	"	"	"	"	"	"	
4-Chloroaniline	ND	58	660	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	11	660	"	"	"	"	"	"	
2-Chloronaphthalene	ND	9.9	330	"	"	"	"	"	"	
2-Chlorophenol	ND	16	330	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	13	330	"	"	"	"	"	"	
Chrysene	ND	11	330	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	18	330	"	"	"	"	"	"	
Dibenzofuran	ND	9.6	330	"	"	"	"	"	"	
Di-n-butyl phthalate	ND	12	330	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	16	330	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	14	330	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	15	330	"	"	"	"	"	"	
3,3´-Dichlorobenzidine	ND	44	660	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	15	330	"	"	"	"	"	"	
Diethyl phthalate	ND	14	330	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	36	330	"	"	"	"	"	"	
Dimethyl phthalate	ND	11	330	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	17	1700	"	"	"	"	"	"	
2,4-Dinitrophenol	ND	10	1700	"	"	"		"	"	
2,4-Dinitrotoluene	ND	20	330	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	13	330	"	"	"	"	"	"	
=,0 Dimirotoraciio	1112	13	330							

Sequoia Analytical - Petaluma



Project: Aerojet RI/FS
Project Number: N/A
Project Manager: Bruce Lewis

P308004 **Reported:** 08/19/03 16:23

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
37D-SB01-20 (P308004-08) Soil	Sampled: 07/29	9/03 11:32	Received:	07/29/03	17:05					
Di-n-octyl phthalate	ND	11	330	ug/kg	1	3080047	08/05/03	08/14/03	EPA 8270C	
Fluoranthene	ND	11	330	"	"	"	"	"	"	
Fluorene	ND	7.9	330	"	"	"	"	"	"	
Hexachlorobenzene	ND	15	330	"	"	"	"	"	"	
Hexachlorobutadiene	ND	17	330	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	10	330	"	"	"	"	"	"	
Hexachloroethane	ND	17	330	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	11	330	"	"	"	"	"	"	
Isophorone	ND	14	330	"	"	"	"	"	"	
2-Methylnaphthalene	ND	10	330	"	"	"	"	"	"	
2-Methylphenol	ND	16	330	"	"	"	"	"	"	
4-Methylphenol	ND	11	330	"	"	"	"	"	"	
Naphthalene	ND	13	330	"	"	"	"	"	"	
2-Nitroaniline	ND	17	1700	"	"	"	"	"	"	
3-Nitroaniline	ND	18	1700	"	"	"	"	"	"	
4-Nitroaniline	ND	22	1700	"	"	"	"	"	"	
Nitrobenzene	ND	16	330	"	"	"	"	"	"	
2-Nitrophenol	ND	14	330	"	"	"	"	"	"	
4-Nitrophenol	ND	23	1700	"	"	"	"	"	"	
N-Nitrosodimethylamine	ND	16	330	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	17	330	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine	ND	15	330	"	"	"	"	"	"	
Pentachlorophenol	ND	12	1700	"	"	"	"	"	"	
Phenanthrene	ND	14	330	"	"	"	"	"	"	
Phenol	ND	12	330	"	"	"	"	"	"	
Pyrene	ND	12	330	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	15	330	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	14	330	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	9.4	330	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		69 %	11-12			"	"	"	"	
Surrogate: Phenol-d6		78 %	16-13	80		"	"	"	"	
Surrogate: Nitrobenzene-d5		84 %	16-12	26		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		87 %	28-13	34		"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		84 %	51-14	14		"	"	"	"	
Surrogate: Terphenyl-d14		108 %	64-11	19		"	"	"	"	



Project: Aerojet RI/FS
Project Number: N/A
Project Manager: Bruce Lewis

P308004 **Reported:** 08/19/03 16:23

### Semivolatile Organic Compounds by EPA Method 8270C Sequoia Analytical - Petaluma

			Reporting							
Analyte	Result	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
37D-SB01-25 (P308004-09) Soil	Sampled: 07/29	9/03 11:56	Received:	07/29/03	17:05					
Acenaphthene	ND	8.7	330	ug/kg	1	3080047	08/05/03	08/14/03	EPA 8270C	
Acenaphthylene	ND	7.6	330	"	"	"	"	"	"	
Anthracene	ND	14	330	"	"	"	"	"	"	
Azobenzene	ND	20	330	"	"	"	"	"	"	
Benzidine	ND	1700	1700	"	"	"	"	"	"	
Benzoic acid	ND	2.7	1700	"	"	"	"	"	"	
Benzo (a) anthracene	ND	7.6	330	"	"	"	"	"	"	
Benzo (b+k) fluoranthene (total)	ND	13	330	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	8.8	330	"	"	"	"	"	"	
Benzo (a) pyrene	ND	10	330	"	"	"	"	"	"	
Benzyl alcohol	ND	11	660	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	9.1	330	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	15	330	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	16	330	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	ND	9.3	330	"	"	"	"	"	"	
4-Bromophenyl phenyl ether	ND	13	330	"	"	"	"	"	"	
Butyl benzyl phthalate	ND	11	330	"	"	"	"	"	"	
4-Chloroaniline	ND	58	660	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	11	660	"	"	"	"	"	"	
2-Chloronaphthalene	ND	9.9	330	"	"	"	"	"	"	
2-Chlorophenol	ND	16	330	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	13	330	"	"	"	"	"	"	
Chrysene	ND	11	330	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	18	330	"	"	"	"	"	"	
Dibenzofuran	ND	9.6	330	"	"	"	"	"	"	
Di-n-butyl phthalate	ND	12	330	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	16	330	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	14	330	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	15	330	"	"	"	"	"	"	
3,3'-Dichlorobenzidine	ND	44	660	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	15	330	"	"	"	"	"	"	
Diethyl phthalate	ND	14	330	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	36	330	"	"	"	"	"	"	
Dimethyl phthalate	ND	11	330	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	17	1700	"	"	"	"	"	"	
2,4-Dinitrophenol	ND	10	1700	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	20	330		"	"	"	"	"	
2,6-Dinitrotoluene	ND	13	330		"	"	"	"	"	
z,o zimuototaene	1112	13	330							

Sequoia Analytical - Petaluma



Project: Aerojet RI/FS
Project Number: N/A
Project Manager: Bruce Lewis

P308004 **Reported:** 08/19/03 16:23

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
37D-SB01-25 (P308004-09) Soil	Sampled: 07/29	9/03 11:56	Received:	07/29/03	3 17:05					
Di-n-octyl phthalate	ND	11	330	ug/kg	1	3080047	08/05/03	08/14/03	EPA 8270C	
Fluoranthene	ND	11	330	"	"	"	"	"	"	
Fluorene	ND	7.9	330	"	"	"	"	"	"	
Hexachlorobenzene	ND	15	330	"	"	"	"	"	"	
Hexachlorobutadiene	ND	17	330	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	10	330	"	"	"	"	"	"	
Hexachloroethane	ND	17	330	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	11	330	"	"	"	"	"	"	
Isophorone	ND	14	330	"	"	"	"	"	"	
2-Methylnaphthalene	ND	10	330	"	"	"	"	"	"	
2-Methylphenol	ND	16	330	"	"	"	"	"	"	
4-Methylphenol	ND	11	330	"	"	"	"	"	"	
Naphthalene	ND	13	330	"	"	"	"	"	"	
2-Nitroaniline	ND	17	1700	"	"	"	"	"	"	
3-Nitroaniline	ND	18	1700	"	"	"	"	"	"	
4-Nitroaniline	ND	22	1700	"	"	"	"	"	"	
Nitrobenzene	ND	16	330	"	"	"	"	"	"	
2-Nitrophenol	ND	14	330	"	"	"	"	"	"	
4-Nitrophenol	ND	23	1700	"	"	"	"	"	"	
N-Nitrosodimethylamine	ND	16	330	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	17	330	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine	ND	15	330	"	"	"	"	"	"	
Pentachlorophenol	ND	12	1700	"	"	"	"	"	"	
Phenanthrene	ND	14	330	"	"	"	"	"	"	
Phenol	ND	12	330	"	"	"	"	"	"	
Pyrene	ND	12	330	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	15	330	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	14	330	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	9.4	330	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		66 %	11-12			"	"	"	"	
Surrogate: Phenol-d6		74 %	16-13	30		"	"	"	"	
Surrogate: Nitrobenzene-d5		74 %	16-12	26		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		65 %	28-13	34		"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		79 %	51-14	14		"	"	"	"	
Surrogate: Terphenyl-d14		103 %	64-11	19		"	"	"	"	
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Project: Aerojet RI/FS
Project Number: N/A
Project Manager: Bruce Lewis

P308004 **Reported:** 08/19/03 16:23

### Semivolatile Organic Compounds by EPA Method 8270C Sequoia Analytical - Petaluma

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
37D-SB01-30 (P308004-10) Soil	Sampled: 07/29	0/03 12:17	Received:	07/29/03	17:05					
Acenaphthene	ND	8.7	330	ug/kg	1	3080047	08/05/03	08/13/03	EPA 8270C	
Acenaphthylene	ND	7.6	330	"	"	"	"	"	"	
Anthracene	ND	14	330	"	"	"	"	"	"	
Azobenzene	ND	20	330	"	"	"	"	"	"	
Benzidine	ND	1700	1700	"	"	"	"	"	"	
Benzoic acid	ND	2.7	1700	"	"	"	"	"	"	
Benzo (a) anthracene	ND	7.6	330	"	"	"	"	"	"	
Benzo (b+k) fluoranthene (total)	ND	13	330	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	8.8	330	"	"	"	"	"	"	
Benzo (a) pyrene	ND	10	330	"	"	"	"	"	"	
Benzyl alcohol	ND	11	660	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	9.1	330	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	15	330	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	16	330	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	ND	9.3	330	"	"	"	"	"	"	
4-Bromophenyl phenyl ether	ND	13	330	"	"	"	"	"	"	
Butyl benzyl phthalate	ND	11	330	"	"	"	"	"	"	
4-Chloroaniline	ND	58	660	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	11	660	"	"	"	"	"	"	
2-Chloronaphthalene	ND	9.9	330	"	"	"	"	"	"	
2-Chlorophenol	ND	16	330	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	13	330	"	"	"	"	"	"	
Chrysene	ND	11	330	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	18	330	"	"	"	"	"	"	
Dibenzofuran	ND	9.6	330	"	"	"	"	"	"	
Di-n-butyl phthalate	ND	12	330	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	16	330	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	14	330	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	15	330	"	"	"	"	"	"	
3,3´-Dichlorobenzidine	ND	44	660	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	15	330	"	"	"	"	"	"	
Diethyl phthalate	ND	14	330	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	36	330	"	"	"	"	"	"	
Dimethyl phthalate	ND	11	330	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	17	1700	"	"	"	"	"	"	
2,4-Dinitrophenol	ND	10	1700	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	20	330	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	13	330	"	"	"	"	"	"	
2,0-Dimuotoruene	ND	13	330							

Sequoia Analytical - Petaluma



Project: Aerojet RI/FS
Project Number: N/A
Project Manager: Bruce Lewis

P308004 **Reported:** 08/19/03 16:23

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
						Daten	Тершей	7 mary zed	Wichiod	rvotes
37D-SB01-30 (P308004-10) Soil	Sampled: 07/29	9/03 12:17		07/29/03	3 17:05					
Di-n-octyl phthalate	ND	11	330	ug/kg	1	3080047	08/05/03	08/13/03	EPA 8270C	
Fluoranthene	ND	11	330	"	"	"	"	"	"	
Fluorene	ND	7.9	330	"	"	"	"	"	"	
Hexachlorobenzene	ND	15	330	"	"	"	"	"	"	
Hexachlorobutadiene	ND	17	330	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	10	330	"	"	"	"	"	"	
Hexachloroethane	ND	17	330	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	11	330	"	"	"	"	"	"	
Isophorone	ND	14	330	"	"	"	"	"	"	
2-Methylnaphthalene	ND	10	330	"	"	"	"	"	"	
2-Methylphenol	ND	16	330	"	"	"	"	"	"	
4-Methylphenol	ND	11	330	"	"	"	"	"	"	
Naphthalene	ND	13	330	"	"	"	"	"	"	
2-Nitroaniline	ND	17	1700	"	"	"	"	"	"	
3-Nitroaniline	ND	18	1700	"	"	"	"	"	"	
4-Nitroaniline	ND	22	1700	"	"	"	"	"	"	
Nitrobenzene	ND	16	330	"	"	"	"	"	"	
2-Nitrophenol	ND	14	330	"	"	"	"	"	"	
4-Nitrophenol	ND	23	1700	"	"	"	"	"	"	
N-Nitrosodimethylamine	ND	16	330	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	17	330	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine	ND	15	330	"	"	"	"	"	"	
Pentachlorophenol	ND	12	1700	"	"	"	"	"	"	
Phenanthrene	ND	14	330	"	"	"	"	"	"	
Phenol	ND	12	330	"	"	"	"	"	"	
Pyrene	ND	12	330	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	15	330	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	14	330	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	9.4	330	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		67 %	11-12	0		"	"	"	"	
Surrogate: Phenol-d6		75 %	16-13	20		"	"	"	"	
Surrogate: Nitrobenzene-d5		78 %	16-12			"	"	"	"	
Surrogate: 2-Fluorobiphenyl		76 %	28-13			"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		82 %	51-14			"	"	"	"	
Surrogate: Terphenyl-d14		103 %	64-11			"	"	"	,,	
Surroguie. Terpitettyt-u17		105 /0	U <del>4</del> -11	/						



Project: Aerojet RI/FS
Project Number: N/A
Project Manager: Bruce Lewis

P308004 **Reported:** 08/19/03 16:23

### Semivolatile Organic Compounds by EPA Method 8270C Sequoia Analytical - Petaluma

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Ratah	Dranarad	Anglyzad	Method	Notes
Alialyte	Kesuit	MIDL	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
37D-SB01-30D (P308004-11) Soil	Sampled: 07	/29/03 12:17	Receive	d: 07/29/0	03 17:05					
Acenaphthene	ND	8.7	330	ug/kg	1	3080047	08/05/03	08/14/03	EPA 8270C	
Acenaphthylene	ND	7.6	330	"	"	"	"	"	"	
Anthracene	ND	14	330	"	"	"	"	"	"	
Azobenzene	ND	20	330	"	"	"	"	"	"	
Benzidine	ND	1700	1700	"	"	"	"	"	"	
Benzoic acid	ND	2.7	1700	"	"	"	"	"	"	
Benzo (a) anthracene	ND	7.6	330	"	"	"	"	"	"	
Benzo (b+k) fluoranthene (total)	ND	13	330	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	8.8	330	"	"	"	"	"	"	
Benzo (a) pyrene	ND	10	330	"	"	"	"	"	"	
Benzyl alcohol	ND	11	660	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	9.1	330	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	15	330	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	16	330	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	ND	9.3	330	"	"	"	"	"	"	
4-Bromophenyl phenyl ether	ND	13	330	"	"	"	"	"	"	
Butyl benzyl phthalate	ND	11	330	"	"	"	"	"	"	
4-Chloroaniline	ND	58	660	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	11	660	"	"	"	"	"	"	
2-Chloronaphthalene	ND	9.9	330	"	"	"	"	"	"	
2-Chlorophenol	ND	16	330	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	13	330	"	"	"	"	"	"	
Chrysene	ND	11	330	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	18	330	"	"	"	"	"	"	
Dibenzofuran	ND	9.6	330	"	"	"	"	"	"	
Di-n-butyl phthalate	ND	12	330	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	16	330	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	14	330	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	15	330	"	"	"	"	"	"	
3,3´-Dichlorobenzidine	ND	44	660	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	15	330	"	"	"	"	"	"	
Diethyl phthalate	ND	14	330	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	36	330	"	"	"	"	"	"	
Dimethyl phthalate	ND	11	330	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	17	1700	"	"	"	"	"	"	
2,4-Dinitrophenol	ND	10	1700	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	20	330	"		"	"	"	"	
2,6-Dinitrotoluene	ND	13	330	"		"	"	"	"	
2,0 2 miliotoruche	112	13	330							

Sequoia Analytical - Petaluma



Project: Aerojet RI/FS
Project Number: N/A
Project Manager: Bruce Lewis

P308004 **Reported:** 08/19/03 16:23

Analyte	Result	I MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
37D-SB01-30D (P308004-11) Soil	Sampled: 07	/29/03 12:17	Receive	d: 07/29/0	)3 17:05					
Di-n-octyl phthalate	ND	11	330	ug/kg	1	3080047	08/05/03	08/14/03	EPA 8270C	
Fluoranthene	ND	11	330	"	"	"	"	"	"	
Fluorene	ND	7.9	330	"	"	"	"	"	"	
Hexachlorobenzene	ND	15	330	"	"	"	"	"	"	
Hexachlorobutadiene	ND	17	330	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	10	330	"	"	"	"	"	"	
Hexachloroethane	ND	17	330	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	11	330	"	"	"	"	"	"	
Isophorone	ND	14	330	"	"	"	"	"	"	
2-Methylnaphthalene	ND	10	330	"	"	"	"	"	"	
2-Methylphenol	ND	16	330	"	"	"	"	"	"	
4-Methylphenol	ND	11	330	"	"	"	"	"	"	
Naphthalene	ND	13	330	"	"	"	"	"	"	
2-Nitroaniline	ND	17	1700	"	"	"	"	"	"	
3-Nitroaniline	ND	18	1700	"	"	"	"	"	"	
4-Nitroaniline	ND	22	1700	"	"	"	"	"	"	
Nitrobenzene	ND	16	330	"	"	"	"	"	"	
2-Nitrophenol	ND	14	330	"	"	"	"	"	"	
4-Nitrophenol	ND	23	1700	"	"	"	"	"	"	
N-Nitrosodimethylamine	ND	16	330	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	17	330	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine	ND	15	330	"	"	"	"	"	"	
Pentachlorophenol	ND	12	1700	"	"	"	"	"	"	
Phenanthrene	ND	14	330	"	"	"	"	"	"	
Phenol	ND	12	330	"	"	"	"	"	"	
Pyrene	ND	12	330	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	15	330	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	14	330	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	9.4	330	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		68 %	11-12	20		"	"	"	"	
Surrogate: Phenol-d6		76 %	16-13	RO		"	"	"	"	
Surrogate: Nitrobenzene-d5		79 %	16-12	26		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		78 %	28-13			"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		81 %	51-14			"	"	"	"	
Surrogate: Terphenyl-d14		105 %	64-11			"	"	"	"	
Z. Z		100 /0	5.11							



Project: Aerojet RI/FS
Project Number: N/A
Project Manager: Bruce Lewis

P308004 **Reported:** 08/19/03 16:23

### Semivolatile Organic Compounds by EPA Method 8270C Sequoia Analytical - Petaluma

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
37D-SB01-35 (P308004-12) Soil	Sampled: 07/29						· Pou	, 200		0.03
Acenaphthene	ND	8.7	330	ug/kg	1	3080047	08/05/03	08/14/03	EPA 8270C	
Acenaphthylene	ND	7.6	330	"	"	"	"	"	"	
Anthracene	ND	14	330	"	"	"	"	"	"	
Azobenzene	ND	20	330	"	"	"	"	"	"	
Benzidine	ND	1700	1700	"	"	"	"	"	"	
Benzoic acid	ND	2.7	1700	"	"	"	"	"	"	
Benzo (a) anthracene	ND	7.6	330	"	"	"	"	"	"	
Benzo (b+k) fluoranthene (total)	ND	13	330	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	8.8	330	"	"	"	"	"	"	
Benzo (a) pyrene	ND	10	330	"	"	"	"	"	"	
Benzyl alcohol	ND	11	660	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	9.1	330	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	15	330	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	16	330	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	ND	9.3	330	"	"	"	"	"	"	
4-Bromophenyl phenyl ether	ND	13	330	"	"	"	"	"	"	
Butyl benzyl phthalate	ND	11	330	"	"	"	"	"	"	
4-Chloroaniline	ND	58	660	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	11	660	"	"	"	"	"	"	
2-Chloronaphthalene	ND	9.9	330	"	"	"	"	"	"	
2-Chlorophenol	ND	16	330	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	13	330	"	"	"	"	"	"	
Chrysene	ND	11	330	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	18	330	"	"	"	"	"	"	
Dibenzofuran	ND	9.6	330	"	"	"	"	"	"	
Di-n-butyl phthalate	ND	12	330	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	16	330	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	14	330	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	15	330	"	"	"	"	"	"	
3,3´-Dichlorobenzidine	ND	44	660	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	15	330	"	"	"	"	"	"	
Diethyl phthalate	ND	14	330	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	36	330	"	"	"	"	"	"	
Dimethyl phthalate	ND	11	330	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	17	1700	"	"	"	"	"	"	
2,4-Dinitrophenol	ND	10	1700	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	20	330	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	13	330	"	"	"	"	"	"	

Sequoia Analytical - Petaluma



Project: Aerojet RI/FS
Project Number: N/A
Project Manager: Bruce Lewis

P308004 **Reported:** 08/19/03 16:23

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
37D-SB01-35 (P308004-12) Soil	Sampled: 07/29	0/03 12:40	Received:	07/29/03	3 17:05					
Di-n-octyl phthalate	ND	11	330	ug/kg	1	3080047	08/05/03	08/14/03	EPA 8270C	
Fluoranthene	ND	11	330	"	"	"	"	"	"	
Fluorene	ND	7.9	330	"	"	"	"	"	"	
Hexachlorobenzene	ND	15	330	"	"	"	"	"	"	
Hexachlorobutadiene	ND	17	330	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	10	330	"	"	"	"	"	"	
Hexachloroethane	ND	17	330	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	11	330	"	"	"	"	"	"	
Isophorone	ND	14	330	"	"	"	"	"	"	
2-Methylnaphthalene	ND	10	330	"	"	"	"	"	"	
2-Methylphenol	ND	16	330	"	"	"	"	"	"	
4-Methylphenol	ND	11	330	"	"	"	"	"	"	
Naphthalene	ND	13	330	"	"	"	"	"	"	
2-Nitroaniline	ND	17	1700	"	"	"	"	"	"	
3-Nitroaniline	ND	18	1700	"	"	"	"	"	"	
4-Nitroaniline	ND	22	1700	"	"	"	"	"	"	
Nitrobenzene	ND	16	330	"	"	"	"	"	"	
2-Nitrophenol	ND	14	330	"	"	"	"	"	"	
4-Nitrophenol	ND	23	1700	"	"	"	"	"	"	
N-Nitrosodimethylamine	ND	16	330	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	17	330	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine	ND	15	330	"	"	"	"	"	"	
Pentachlorophenol	ND	12	1700	"	"	"	"	"	"	
Phenanthrene	ND	14	330	"	"	"	"	"	"	
Phenol	ND	12	330	"	"	"	"	"	"	
Pyrene	ND	12	330	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	15	330	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	14	330	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	9.4	330	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		64 %	11-12	0		"	"	"	"	
Surrogate: Phenol-d6		73 %	16-13	0		"	"	"	"	
Surrogate: Nitrobenzene-d5		74 %	16-12	6		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		69 %	28-13	4		"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		76 %	51-14	!4		"	"	"	"	
Surrogate: Terphenyl-d14		104 %	64-11			"	"	"	"	



Project: Aerojet RI/FS
Project Number: N/A
Project Manager: Bruce Lewis

P308004 **Reported:** 08/19/03 16:23

### Semivolatile Organic Compounds by EPA Method 8270C Sequoia Analytical - Petaluma

	D 1	) (D)	Reporting	TT 1:	D.1:	D . 1	ъ.			
Analyte	Result	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
37D-SB01-40 (P308004-13) Soil	Sampled: 07/29	9/03 13:12	Received:	07/29/03	17:05					
Acenaphthene	ND	8.7	330	ug/kg	1	3080047	08/05/03	08/14/03	EPA 8270C	
Acenaphthylene	ND	7.6	330	"	"	"	"	"	"	
Anthracene	ND	14	330	"	"	"	"	"	"	
Azobenzene	ND	20	330	"	"	"	"	"	"	
Benzidine	ND	1700	1700	"	"	"	"	"	"	
Benzoic acid	ND	2.7	1700	"	"	"	"	"	"	
Benzo (a) anthracene	ND	7.6	330	"	"	"	"	"	"	
Benzo (b+k) fluoranthene (total)	ND	13	330	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	8.8	330	"	"	"	"	"	"	
Benzo (a) pyrene	ND	10	330	"	"	"	"	"	"	
Benzyl alcohol	ND	11	660	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	9.1	330	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	15	330	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	16	330	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	ND	9.3	330	"	"	"	"	"	"	
4-Bromophenyl phenyl ether	ND	13	330	"	"	"	"	"	"	
Butyl benzyl phthalate	ND	11	330	"	"	"	"	"	"	
4-Chloroaniline	ND	58	660	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	11	660	"	"	"	"	"	"	
2-Chloronaphthalene	ND	9.9	330	"	"	"	"	"	"	
2-Chlorophenol	ND	16	330	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	13	330	"	"	"	"	"	"	
Chrysene	ND	11	330	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	18	330	"	"	"	"	"	"	
Dibenzofuran	ND	9.6	330	"	"	"	"	"	"	
Di-n-butyl phthalate	ND	12	330	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	16	330	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	14	330	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	15	330	"	"	"	"	"	"	
3,3´-Dichlorobenzidine	ND	44	660	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	15	330	"	"	"	"	"	"	
Diethyl phthalate	ND	14	330	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	36	330	"	"	"	"	"	"	
Dimethyl phthalate	ND	11	330	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	17	1700	"	"	"	"	"	"	
2,4-Dinitrophenol	ND	10	1700	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	20	330	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	13	330	"	"	"	"	"	"	
_,	1,2	10	220							

Sequoia Analytical - Petaluma



Project: Aerojet RI/FS
Project Number: N/A
Project Manager: Bruce Lewis

P308004 **Reported:** 08/19/03 16:23

Floranthene	Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Floranthene	37D-SB01-40 (P308004-13) Soil	Sampled: 07/29	9/03 13:12	Received:	07/29/03	3 17:05					
Fluorene	Di-n-octyl phthalate	ND	11	330	ug/kg	1	3080047	08/05/03	08/14/03	EPA 8270C	
Hexachlorobenzene ND 15 330 " " " " " " " " Hexachlorobenzene ND 17 330 " " " " " " " " " " " " " " " " " "	Fluoranthene	ND		330			"				
Hexachlorobutadiene ND 17 330 " " " " " " " Hexachlorocyclopentadiene ND 10 330 " " " " " " " " " " " " " " " " "	Fluorene	ND					"			"	
Hexachlorocyclopentadiene ND 10 330 " " " " " " " " " " " " " " " " "			15							"	
Hexachlorochane	Hexachlorobutadiene										
Indeno (1,2,3-cd) pyrene   ND	Hexachlorocyclopentadiene				"	"	"	"	"	"	
Sophorone   ND			17		"	"	"	"	"	"	
14   15   15   16   17   17   17   17   17   17   17	Indeno (1,2,3-cd) pyrene		11				"			"	
2-Methylphenol ND 16 330 " " " " " " " " " " " " " " " " " "	Isophorone	ND	14	330	"	"	"	"	"	"	
4-Methylphenol ND 11 330 " " " " " " " " " " " " " " " " " "	2-Methylnaphthalene				"		"			"	
Name	2-Methylphenol	ND	16	330	"	"	"	"	"	"	
2-Nitroaniline	4-Methylphenol	ND	11	330	"	"	"	"	"	"	
1700	Naphthalene	ND	13	330	"	"	"	"	"	"	
4-Nitroaniline ND 22 1700 " " " " " " " " " " " " " " " " " "	2-Nitroaniline	ND	17		"	"	"	"	"	"	
Nitrobenzene ND 16 330 " " " " " " " " " " 2-Nitrophenol ND 14 330 " " " " " " " " " " " " " " " " " "	3-Nitroaniline	ND			"	"	"	"	"	"	
No.   No.	4-Nitroaniline	ND	22	1700	"	"	"	"	"	"	
A-Nitrophenol   ND   23   1700   "	Nitrobenzene	ND	16	330	"	"	"	"	"	"	
N-Nitrosodimethylamine ND 16 330 """"""""""""""""""""""""""""""""""	2-Nitrophenol				"	"	"	"	"	"	
N-Nitrosodiphenylamine ND 17 330 """"""""""""""""""""""""""""""""""	4-Nitrophenol	ND	23	1700	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine ND 15 330 """"""""""""""""""""""""""""""""""	N-Nitrosodimethylamine	ND	16	330	"	"	"	"	"	"	
Pentachlorophenol ND 12 1700 " " " " " " " " " " Phenanthrene ND 14 330 " " " " " " " " " " " " " " " " " "	N-Nitrosodiphenylamine	ND	17	330	"	"	"	"	"	"	
Phenanthrene         ND         14         330         "	N-Nitrosodi-n-propylamine	ND		330	"	"	"	"	"	"	
Phenol         ND         12         330         "	Pentachlorophenol	ND	12	1700	"	"	"	"	"	"	
Pyrene ND 12 330 " " " " " " " " " 1,2,4-Trichlorobenzene ND 15 330 " " " " " " " " " " " " " 2,4,5-Trichlorophenol ND 14 330 " " " " " " " " " " " " " " " " " "	Phenanthrene	ND	14	330	"	"	"	"	"	"	
1,2,4-Trichlorobenzene ND 15 330 " " " " " " " " " " 2,4,5-Trichlorophenol ND 14 330 " " " " " " " " " " " " " " " " " "	Phenol	ND	12	330	"	"	"	"	"	"	
2,4,5-Trichlorophenol       ND       14       330       "<	Pyrene	ND	12	330	"	"	"	"	"	"	
ND       9.4       330       " <td>1,2,4-Trichlorobenzene</td> <td>ND</td> <td>15</td> <td>330</td> <td>"</td> <td>"</td> <td>"</td> <td>"</td> <td>"</td> <td>"</td> <td></td>	1,2,4-Trichlorobenzene	ND	15	330	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol       67 %       11-120       " " " " "         Surrogate: Phenol-d6       75 %       16-130       " " " " "         Surrogate: Nitrobenzene-d5       77 %       16-126       " " " " " "         Surrogate: 2-Fluorobiphenyl       75 %       28-134       " " " " " "         Surrogate: 2,4,6-Tribromophenol       82 %       51-144       " " " " " "	2,4,5-Trichlorophenol	ND	14	330	"	"	"	"	"	"	
Surrogate: Phenol-d6       75 %       16-130       " " " " " "         Surrogate: Nitrobenzene-d5       77 %       16-126       " " " " " "         Surrogate: 2-Fluorobiphenyl       75 %       28-134       " " " " " "         Surrogate: 2,4,6-Tribromophenol       82 %       51-144       " " " " " "	2,4,6-Trichlorophenol	ND	9.4	330	"	"	"	"	"	"	
Surrogate: Nitrobenzene-d5       77 %       16-126       " " " " " "         Surrogate: 2-Fluorobiphenyl       75 %       28-134       " " " " " "         Surrogate: 2,4,6-Tribromophenol       82 %       51-144       " " " " " "	Surrogate: 2-Fluorophenol		67 %	11-12	20		"	"	"	"	
Surrogate: 2-Fluorobiphenyl       75 %       28-134       " " " " "         Surrogate: 2,4,6-Tribromophenol       82 %       51-144       " " " " "	Surrogate: Phenol-d6		75 %	16-13	30		"	"	"	"	
Surrogate: 2,4,6-Tribromophenol 82 % 51-144 " " " "	Surrogate: Nitrobenzene-d5		77 %	16-12	26		"	"	"	"	
Surrogate: 2,4,6-Tribromophenol 82 % 51-144 " " " "	Surrogate: 2-Fluorobiphenyl		75 %	28-13	34		"	"	"	"	
	Surrogate: 2,4,6-Tribromophenol		82 %	51-14	14		"	"	"	"	
	Surrogate: Terphenyl-d14		105 %	64-11	19		"	"	"	"	

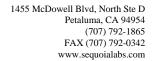


Project: Aerojet RI/FS
Project Number: N/A
Project Manager: Bruce Lewis

P308004 **Reported:** 08/19/03 16:23

# Total Petroleum Hydrocarbons as Diesel & others by EPA 8015B - Quality Control Sequoia Analytical - Petaluma

		Report	ing		Spike	Source		%REC		RPD	
Analyte	Result	MDL Li	mit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 3080053 - EPA 3510C											
Blank (3080053-BLK1)					Prepared:	08/05/03	Analyzed	1: 08/07/03			
Diesel Range Organics (C10-C28)	ND	0.0	50	mg/l							
Surrogate: Octacosane	0.0557			"	0.0500		111	54-141			
<b>Laboratory Control Sample (308005</b>	3-BS1)				Prepared:	08/05/03	Analyzed	1: 08/07/03			
Diesel Range Organics (C10-C28)	0.920	0.0	50	mg/l	1.00		92	49-102			
Surrogate: Octacosane	0.0569			"	0.0500		114	54-141			
<b>Laboratory Control Sample Dup (30</b>	80053-BSD1	1)			Prepared:	08/05/03	Analyzed	1: 08/07/03			
Diesel Range Organics (C10-C28)	0.901	0.0	50	mg/l	1.00		90	49-102	2	20	
Surrogate: Octacosane	0.0569			"	0.0500		114	54-141			
Batch 3080068 - CA LUFT - orb	shaker										
Blank (3080068-BLK1)					Prepared:	08/05/03	Analyzed	1: 08/07/03			
Diesel Range Organics (C10-C28)	ND	:	5.0	mg/kg							
Surrogate: Octacosane	1.44			"	1.67		86	52-133			
<b>Laboratory Control Sample (308006</b>	8-BS1)				Prepared:	08/05/03	Analyzed	1: 08/12/03			
Diesel Range Organics (C10-C28)	30.4	:	5.0	mg/kg	33.3		91	62-103			
Surrogate: Octacosane	1.77			"	1.67		106	52-133			
Matrix Spike (3080068-MS1)	Sou	rce: P308004-10			Prepared:	08/05/03	Analyzed	1: 08/07/03			
Diesel Range Organics (C10-C28)	27.5	:	5.0	mg/kg	33.3	1.9	77	62-103			
Surrogate: Octacosane	1.58			"	1.67		95	52-133			
Matrix Spike Dup (3080068-MSD1)	Sou	rce: P308004-10			Prepared:	08/05/03	Analyzed	1: 08/07/03			
Diesel Range Organics (C10-C28)	28.2	:	5.0	mg/kg	33.3	1.9	79	62-103	3	35	
Surrogate: Octacosane	1.68			"	1.67		101	52-133			





Project: Aerojet RI/FS
Project Number: N/A
Project Manager: Bruce Lewis

P308004 **Reported:** 08/19/03 16:23

RPD

%REC

### Tentatively Identified Compounds by GC/MS - Quality Control Sequoia Analytical - Petaluma

Spike

Source

Analyte	Result	MDL	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 3080047 - EPA 3550A	Sonication										
Blank (3080047-BLK1)					Prepared:	08/05/03	Analyzed	: 08/13/03			
No TICs found	ND		300	ug/kg							
Batch 3080056 - EPA 3520B	LiqLiquid										
Blank (3080056-BLK1)					Prepared:	08/05/03	Analyzed	: 08/13/03			

No TICs found ND

10 ug/l

Reporting



Project: Aerojet RI/FS
Project Number: N/A
Project Manager: Bruce Lewis

P308004 **Reported:** 08/19/03 16:23

# Semivolatile Organic Compounds by EPA Method 8270C - Quality Control Sequoia Analytical - Petaluma

			Reporting		Spike	Source		%REC		RPD	
Analyte	Result	MDL	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Blank (3080047-BLK1)					Prepared: 08/05/03 Analyzed: 0
Acenaphthene	ND	8.7	330	ug/kg	
Acenaphthylene	ND	7.6	330	"	
Anthracene	ND	14	330	"	
Azobenzene	ND	20	330	"	
Benzidine	ND	1700	1700	"	
Benzoic acid	ND	2.7	1700	"	
Benzo (a) anthracene	ND	7.6	330	"	
Benzo (b+k) fluoranthene (total)	ND	13	330	"	
Benzo (g,h,i) perylene	ND	8.8	330	"	
Benzo (a) pyrene	ND	10	330	"	
Benzyl alcohol	ND	11	660	"	
Bis(2-chloroethoxy)methane	ND	9.1	330	"	
Bis(2-chloroethyl)ether	ND	15	330	"	
Bis(2-chloroisopropyl)ether	ND	16	330	"	
Bis(2-ethylhexyl)phthalate	ND	9.3	330	"	
-Bromophenyl phenyl ether	ND	13	330	"	
Butyl benzyl phthalate	ND	11	330	"	
l-Chloroaniline	ND	58	660	"	
-Chloro-3-methylphenol	ND	11	660	"	
-Chloronaphthalene	ND	9.9	330	"	
-Chlorophenol	ND	16	330	"	
-Chlorophenyl phenyl ether	ND	13	330	"	
Chrysene	ND	11	330	"	
Dibenz (a,h) anthracene	ND	18	330	"	
Dibenzofuran	ND	9.6	330	"	
Di-n-butyl phthalate	ND	12	330	"	
,2-Dichlorobenzene	ND	16	330	"	
,3-Dichlorobenzene	ND	14	330	"	
,4-Dichlorobenzene	ND	15	330	"	
3,3'-Dichlorobenzidine	ND	44	660	"	
2,4-Dichlorophenol	ND	15	330	"	
Diethyl phthalate	ND	14	330	"	
2,4-Dimethylphenol	ND	36	330	"	
Dimethyl phthalate	ND	11	330	"	
4,6-Dinitro-2-methylphenol	ND	17	1700	"	
2,4-Dinitrophenol	ND	10	1700	"	
,4-Dinitrotoluene	ND	20	330	"	

Sequoia Analytical - Petaluma



Project: Aerojet RI/FS
Project Number: N/A
Project Manager: Bruce Lewis

P308004 **Reported:** 08/19/03 16:23

### Semivolatile Organic Compounds by EPA Method 8270C - Quality Control Sequoia Analytical - Petaluma

			Reporting		Spike	Source		%REC		RPD	
Analyte	Result	MDL	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Blank (3080047-BLK1)					Prepared: 08/0	15/03 Analyza	d· 08/13/03	
2,6-Dinitrotoluene	ND	13	330	ug/kg	r repared. 06/0	5/05 Anaryze	u. 06/15/05	
Di-n-octyl phthalate	ND	11	330	ug/kg				
Fluoranthene	ND	11	330	"				
Fluorene	ND ND	7.9	330	"				
Hexachlorobenzene	ND ND	15	330	"				
Hexachlorobutadiene	ND ND	17	330	"				
Hexachlorocyclopentadiene	ND ND	10	330	"				
Hexachloroethane	ND ND	17	330	"				
Indeno (1,2,3-cd) pyrene	ND ND	17	330	"				
= -				"				
Isophorone	ND	14	330	"				
2-Methylnaphthalene	ND	10	330	"				
2-Methylphenol	ND	16	330					
4-Methylphenol	ND	11	330	,,				
Naphthalene	ND	13	330	"				
2-Nitroaniline	ND	17	1700					
3-Nitroaniline	ND	18	1700	"				
4-Nitroaniline	ND	22	1700					
Nitrobenzene	ND	16	330	"				
2-Nitrophenol	ND	14	330	"				
4-Nitrophenol	ND	23	1700	"				
N-Nitrosodimethylamine	ND	16	330	"				
N-Nitrosodiphenylamine	ND	17	330	"				
N-Nitrosodi-n-propylamine	ND	15	330	"				
Pentachlorophenol	ND	12	1700	"				
Phenanthrene	ND	14	330	"				
Phenol	ND	12	330	"				
Pyrene	ND	12	330	"				
1,2,4-Trichlorobenzene	ND	15	330	"				
2,4,5-Trichlorophenol	ND	14	330	"				
2,4,6-Trichlorophenol	ND	9.4	330	"				
Surrogate: 2-Fluorophenol	3160			"	5000	63	11-120	
Surrogate: Phenol-d6	3490			"	5000	70	16-130	
Surrogate: Nitrobenzene-d5	2490			"	3330	75	16-126	
Surrogate: 2-Fluorobiphenyl	2620			"	3330	79	28-134	
Surrogate: 2,4,6-Tribromophenol	3890			"	5000	78	51-144	
Surrogate: Terphenyl-d14	3540			"	3330	106	64-119	

Sequoia Analytical - Petaluma



Analyte

Project: Aerojet RI/FS
Project Number: N/A
Project Manager: Bruce Lewis

Spike

Level

Source

Result

%REC

P308004 **Reported:** 08/19/03 16:23

RPD

Limit

Notes

%REC

Limits

RPD

# Semivolatile Organic Compounds by EPA Method 8270C - Quality Control Sequoia Analytical - Petaluma

Units

Reporting

Limit

MDL

Result

3210

2510

3240

2430

3620

2630

3470

3620

2640

2420

4780

3580

23

15

12

12

12

15

1700

330

1700

330

330

330

3330

3330

3330

3330

3330

3330

5000

5000

3330

3330

5000

3330

ND

ND

ND

ND

ND

ND

96

75

97

73

109

79

69

72

79

73

96

108

20-110

23-109

25-123

19-100

12-131

17-110

11-120

16-130

16-126

28-134

51-144

64-119

Batch 3080047 - EPA 3550A So					D 1	00/05/02	A 1	1 00/12/02	
Laboratory Control Sample (30800	•				-	08/05/03	-	d: 08/13/03	
Acenaphthene	2770	8.7	330	ug/kg	3330		83	34-114	
4-Chloro-3-methylphenol	2910	11	660	"	3330		87	24-118	
2-Chlorophenol	2510	16	330	"	3330		75	29-101	
1,4-Dichlorobenzene	2470	15	330	"	3330		74	25-104	
2,4-Dinitrotoluene	3540	20	330	"	3330		106	42-116	
4-Nitrophenol	3130	23	1700	"	3330		94	31-109	
N-Nitrosodi-n-propylamine	2540	15	330	"	3330		76	23-117	
Pentachlorophenol	3310	12	1700	"	3330		99	34-114	
Phenol	2430	12	330	"	3330		73	20-105	
Pyrene	3630	12	330	"	3330		109	30-124	
1,2,4-Trichlorobenzene	2740	15	330	"	3330		82	28-112	
Surrogate: 2-Fluorophenol	3480			"	5000		70	11-120	
Surrogate: Phenol-d6	3610			"	5000		72	16-130	
Surrogate: Nitrobenzene-d5	2710			"	3330		81	16-126	
Surrogate: 2-Fluorobiphenyl	2740			"	3330		82	28-134	
Surrogate: 2,4,6-Tribromophenol	4950			"	5000		99	51-144	
Surrogate: Terphenyl-d14	3590			"	3330		108	64-119	
Matrix Spike (3080047-MS1)	Sour	ce: P30800	4-10		Prepared:	08/05/03	Analyze	d: 08/13/03	
Acenaphthene	2710	8.7	330	ug/kg	3330	ND	81	30-110	
4-Chloro-3-methylphenol	2910	11	660	"	3330	ND	87	27-109	
2-Chlorophenol	2540	16	330	"	3330	ND	76	24-98	
1,4-Dichlorobenzene	2400	15	330	"	3330	ND	72	24-89	
2,4-Dinitrotoluene	3590	20	330	"	3330	ND	108	35-110	
4-Dinitrotoluene	3590	20	330	"	3330	ND	108	35-110	

Sequoia Analytical - Petaluma

4-Nitrophenol

Phenol

Pyrene

Pentachlorophenol

1,2,4-Trichlorobenzene

Surrogate: Phenol-d6

Surrogate: 2-Fluorophenol

Surrogate: Nitrobenzene-d5

Surrogate: 2-Fluorobiphenyl

Surrogate: Terphenyl-d14

Surrogate: 2,4,6-Tribromophenol

N-Nitrosodi-n-propylamine



Project: Aerojet RI/FS
Project Number: N/A
Project Manager: Bruce Lewis

P308004 **Reported:** 08/19/03 16:23

### Semivolatile Organic Compounds by EPA Method 8270C - Quality Control Sequoia Analytical - Petaluma

			Reporting		Spike	Source		%REC		RPD	
Analyte	Result	MDL	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 3080047	′ -	<b>EPA</b>	3550A	Sonication
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Matrix Spike Dup (3080047-MSD1)	Sou	rce: P30800	4-10		Prepared:	08/05/03				
Acenaphthene	2870	8.7	330	ug/kg	3330	ND	86	30-110	6	26
4-Chloro-3-methylphenol	2990	11	660	"	3330	ND	90	27-109	3	21
2-Chlorophenol	2590	16	330	"	3330	ND	78	24-98	2	27
1,4-Dichlorobenzene	2470	15	330	"	3330	ND	74	24-89	3	25
2,4-Dinitrotoluene	3440	20	330	"	3330	ND	103	35-110	4	15
4-Nitrophenol	3030	23	1700	"	3330	ND	91	20-110	6	23
N-Nitrosodi-n-propylamine	2630	15	330	"	3330	ND	79	23-109	5	31
Pentachlorophenol	3070	12	1700	"	3330	ND	92	25-123	5	43
Phenol	2460	12	330	"	3330	ND	74	19-100	1	21
Pyrene	3430	12	330	"	3330	ND	103	12-131	5	26
1,2,4-Trichlorobenzene	2760	15	330	"	3330	ND	83	17-110	5	30
Surrogate: 2-Fluorophenol	3560			"	5000		71	11-120		
Surrogate: Phenol-d6	3690			"	5000		74	16-130		
Surrogate: Nitrobenzene-d5	2750			"	3330		83	16-126		
Surrogate: 2-Fluorobiphenyl	2750			"	3330		83	28-134		
Surrogate: 2,4,6-Tribromophenol	4720			"	5000		94	51-144		
Surrogate: Terphenyl-d14	3450			"	3330		104	64-119		

### Batch 3080056 - EPA 3520B LiqLiquid

Blank (3080056-BLK1)					Prepared: 08/05/03 Analyzed: 08/13/03
Acenaphthene	ND	1.2	10	ug/l	
Acenaphthylene	ND	1.4	10	"	
Anthracene	ND	0.60	10	"	
Azobenzene	ND	0.63	20	"	
Benzidine	ND	3.2	50	"	
Benzoic acid	ND	3.9	50	"	
Benzo (a) anthracene	ND	0.44	10	"	
Benzo (b+k) fluoranthene (total)	ND	1.1	10	"	
Benzo (g,h,i) perylene	ND	0.64	10	"	
Benzo (a) pyrene	ND	0.87	10	"	
Benzyl alcohol	ND	3.9	20	"	
Bis(2-chloroethoxy)methane	ND	1.1	10	"	
Bis(2-chloroethyl)ether	ND	1.5	10	"	
Bis(2-chloroisopropyl)ether	ND	1.5	10	"	
Bis(2-ethylhexyl)phthalate	ND	2.8	10	"	
4-Bromophenyl phenyl ether	ND	0.70	10	"	

Sequoia Analytical - Petaluma



Project: Aerojet RI/FS
Project Number: N/A
Project Manager: Bruce Lewis

P308004 **Reported:** 08/19/03 16:23

### Semivolatile Organic Compounds by EPA Method 8270C - Quality Control Sequoia Analytical - Petaluma

			Reporting		Spike	Source		%REC		RPD	
Analyte	Result	MDL	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Blank (3080056-BLK1)					Prepared: 08/05/03 Analyzed: 08/13/03
Butyl benzyl phthalate	ND	2.7	10	ug/l	
4-Chloroaniline	ND	0.55	20	"	
4-Chloro-3-methylphenol	ND	2.3	20	"	
2-Chloronaphthalene	ND	1.4	10	"	
2-Chlorophenol	ND	0.31	10	"	
4-Chlorophenyl phenyl ether	ND	0.97	10	"	
Chrysene	ND	0.45	10	"	
Dibenz (a,h) anthracene	ND	0.55	10	"	
Dibenzofuran	ND	1.1	10	"	
Di-n-butyl phthalate	ND	1.1	10	"	
1,2-Dichlorobenzene	ND	1.8	10	"	
1,3-Dichlorobenzene	ND	1.8	10	"	
1,4-Dichlorobenzene	ND	1.8	10	"	
3,3´-Dichlorobenzidine	ND	2.9	20	"	
2,4-Dichlorophenol	ND	0.47	10	"	
Diethyl phthalate	ND	0.42	10	"	
2,4-Dimethylphenol	ND	1.4	10	"	
Dimethyl phthalate	ND	0.56	10	"	
4,6-Dinitro-2-methylphenol	ND	3.4	50	"	
2,4-Dinitrophenol	ND	2.3	50	"	
2,4-Dinitrotoluene	ND	0.82	10	"	
2,6-Dinitrotoluene	ND	0.76	10	"	
Di-n-octyl phthalate	ND	0.81	10	"	
Fluoranthene	ND	0.44	10	"	
Fluorene	ND	1.0	10	"	
Hexachlorobenzene	ND	0.79	10	"	
Hexachlorobutadiene	ND	1.5	10	"	
Hexachlorocyclopentadiene	ND	0.31	10	"	
Hexachloroethane	ND	1.7	10	"	
Indeno (1,2,3-cd) pyrene	ND	0.61	10	"	
Isophorone	ND	0.71	10	"	
2-Methylnaphthalene	ND	1.4	10	"	
2-Methylphenol	ND	3.4	10	"	
4-Methylphenol	ND	3.0	10	"	
Naphthalene	ND	1.6	10	"	
2-Nitroaniline	ND	0.69	50	"	
3-Nitroaniline	ND	0.54	50	"	

Sequoia Analytical - Petaluma



Project Number: N/A
Project Manager: Bruce Lewis

P308004 **Reported:** 08/19/03 16:23

# Semivolatile Organic Compounds by EPA Method 8270C - Quality Control Sequoia Analytical - Petaluma

			Reporting		Spike	Source		%REC		RPD	
Analyte	Result	MDL	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Blank (3080056-BLK1)					Prepared: 08/0	5/03 Analyzed	1: 08/13/03	
4-Nitroaniline	ND	0.61	50	ug/l	_			
Nitrobenzene	ND	1.3	10	"				
2-Nitrophenol	ND	0.42	10	"				
4-Nitrophenol	ND	0.51	50	"				
N-Nitrosodimethylamine	ND	1.4	20	"				
N-Nitrosodiphenylamine	ND	3.9	10	"				
N-Nitrosodi-n-propylamine	ND	0.58	10	"				
Pentachlorophenol	ND	3.1	50	"				
Phenanthrene	ND	0.56	10	"				
Phenol	ND	0.48	10	"				
Pyrene	ND	0.28	10	"				
Pyridine	ND	3.8	10	"				
1,2,4-Trichlorobenzene	ND	1.7	10	"				
2,4,5-Trichlorophenol	ND	0.61	10	"				
2,4,6-Trichlorophenol	ND	0.31	10	"				
Surrogate: 2-Fluorophenol	83.4			"	150	56	15-103	
Surrogate: Phenol-d6	120			"	150	80	18-115	
Surrogate: Nitrobenzene-d5	95.4			"	100	95	39-103	
Surrogate: 2-Fluorobiphenyl	94.5			"	100	94	40-124	
Surrogate: 2,4,6-Tribromophenol	152			"	150	101	11-142	
Surrogate: Terphenyl-d14	122			"	100	122	56-139	
Laboratory Control Sample (3080	056-BS1)				Prepared: 08/0	5/03 Analyzed	d: 08/13/03	
Acenaphthene	105	1.2	10	ug/l	100	105	58-120	
4-Chloro-3-methylphenol	110	2.3	20	"	100	110	51-116	
2-Chlorophenol	90.9	0.31	10	"	100	91	28-111	
1,4-Dichlorobenzene	82.1	1.8	10	"	100	82	29-108	
2,4-Dinitrotoluene	122	0.82	10	"	100	122	60-114	Q-LIN
4-Nitrophenol	101	0.51	50	"	100	101	25-148	
N-Nitrosodi-n-propylamine	96.2	0.58	10	"	100	96	29-119	
Pentachlorophenol	112	3.1	50	"	100	112	40-131	
Phenol	83.2	0.48	10	"	100	83	22-117	
Pyrene	120	0.28	10	"	100	120	52-127	
1,2,4-Trichlorobenzene	91.3	1.7	10	"	100	91	24-131	
Surrogate: 2-Fluorophenol	113			"	150	75	15-103	
Surrogate: Phenol-d6	124			"	150	83	18-115	
Surrogate: Nitrobenzene-d5	102			"	100	102	39-103	

Sequoia Analytical - Petaluma



Project: Aerojet RI/FS
Project Number: N/A
Project Manager: Bruce Lewis

P308004 **Reported:** 08/19/03 16:23

### Semivolatile Organic Compounds by EPA Method 8270C - Quality Control Sequoia Analytical - Petaluma

			Reporting		Spike	Source		%REC		RPD	
Analyte	Result	MDL	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

<b>Laboratory Control Sample (3080</b>		Prepared: 08/05/03 Analyzed: 08/13/03								
Surrogate: 2-Fluorobiphenyl	103			ug/l	100	103	40-124			
Surrogate: 2,4,6-Tribromophenol	179			"	150	119	11-142			
Surrogate: Terphenyl-d14	121			"	100	121	56-139			
<b>Laboratory Control Sample Dup (</b>	3080056-BSD	1)			Prepared: 08/0	05/03 Analyzed	1: 08/13/03			
Acenaphthene	104	1.2	10	ug/l	100	104	58-120	1	27	
4-Chloro-3-methylphenol	111	2.3	20	"	100	111	51-116	0.9	30	
2-Chlorophenol	92.0	0.31	10	"	100	92	28-111	1	39	
1,4-Dichlorobenzene	83.2	1.8	10	"	100	83	29-108	1	41	
2,4-Dinitrotoluene	119	0.82	10	"	100	119	60-114	2	22	Q-LIM
4-Nitrophenol	96.3	0.51	50	"	100	96	25-148	5	44	
N-Nitrosodi-n-propylamine	95.7	0.58	10	"	100	96	29-119	0.5	44	
Pentachlorophenol	109	3.1	50	"	100	109	40-131	3	33	
Phenol	84.2	0.48	10	"	100	84	22-117	1	33	
Pyrene	117	0.28	10	"	100	117	52-127	3	25	
1,2,4-Trichlorobenzene	94.0	1.7	10	"	100	94	24-131	3	48	
Surrogate: 2-Fluorophenol	116			"	150	77	15-103			
Surrogate: Phenol-d6	125			"	150	83	18-115			
Surrogate: Nitrobenzene-d5	103			"	100	103	39-103			
Surrogate: 2-Fluorobiphenyl	104			"	100	104	40-124			
Surrogate: 2,4,6-Tribromophenol	174			"	150	116	11-142			
Surrogate: Terphenyl-d14	118			"	100	118	56-139			





Environmental Resources Management Project: Aerojet RI/FS P308004
2525 Natomas Park Drive, Suite 350 Project Number: N/A Reported:
Sacramento CA, 95833 Project Manager: Bruce Lewis 08/19/03 16:23

### **Notes and Definitions**

J Estimated value.

Q-LIM The percent recovery was outside of the control limits. The samples results may still be useful for their intended purpose.

S-02 The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds

present in the sample extract.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

7.67.35 v. 4						PINK	MPLER:	3RD COPY – SAMPLER: <i>PINK</i>	3RD (	IY: YELLOW	2ND COPY - LABORATORY: YELLOW	2ND COPY -		ORIGINAL - ENVIRONMENTAL OPERATIONS: WHITE	RONMENTA	RIGINAL - ENVI
1650	8	7-12						2					(			COMMENTS:
230	C KA	2		1			TOTAL DESCRIPTION OF THE PROPERTY OF THE PROPE				CORRILL CORRILL	5	X	gen/s	0(3/8	Monie
LABORATORY DELIVERED TO:			4		SIGNATURE)		BORATOR	RECEIVED BY LABORATORY BY:	RECE				,		(SIGNATURE)	RECINOUISHED BY:
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URE 3.6 %	MPERATO	OLER THA	COO	MILLION AND IN							\	\				1106 <b>p</b>
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V			X	×			N.		F	312	9/03 1	07/2	40	S601-40	370-	106 <b>N</b>
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	Manifestation (Control of Control		X	Z			N.		CORRECT BOOK	7(7		07/29	R	5801-30D	370-	1 0 0 x
	G/J		X	X			<b>X</b>			217	29/03	07/2	30	56-188	370	1106
	9		<b>X</b> .	メ			13			156	79 33	07/7	2	801-78	370-	1108
	o⟨}-		Z	$\geq$			8		Selective selections.	1132	9 63	2120	C,	SRo1-70	145	
	7	NORMAL ESCULIA	×.	×			GM.		54782	2 3	202	07/2	3	5301-15	3 370-	1106 <b>G</b>
	6	**************************************	×	$\times$		PART OF THE PA	1	2	ANROR	199	9103	07 12		SB01-15E	570	108
REPORTICE		MATERIAL MAT	X	X			SM.		<b>※</b> %	10 46 Z	29/03/	07/2	0	SR01-10	370-	1 1 0 6 m
	4		>,		Z		3			1039 12	9/03	07/2	5	) - 10%	37	1106 <b>D</b>
mited sample volume REPORT TH	3		Ŧ	OS/ Met,	-       65		57A	7	$\leftarrow$	1020	9103	07/2	2.5	-5801-25	370	1106 c
	72			×	2		ML		audinimana <sub>s</sub>	1542	8/03	87170	.52	826-25	35P	1 1 0 6 <b>B</b>
REPORT TICS	Ŧ	3080E		X			E	§	2×6" 2×6"	1615	118/03	07 12	26	SB 26-20	351)-	1106 A
REMARKS	LABO		TP	PER	94100 AVEILINED (82)	BNA	Windship of the		TYPE OF CONTAINER	TIME	DATE MM/DD/YY	MM/C	DEPTH (FT.)	FIELD SAMPLE NO.	S	COC SAMPLE ID
	DRATORY		H-D	CHLORATE	ALS EPA	ngokasunakan paksi kacasan senengia mese	TYPE (USO	SAMPLE C				313)	SIL	SA ING	(SIGNATURE)	SAMPLERS (SI
OUR ADDRESS COMPANY	QA/QC		2y 80	bu 82	an adaptical California Andrews or tra	THE PROPERTY OF THE PROPERTY O		CONTAINE		·			h O	AUGEH HOLE NO:	NC.	SOURCE SIE NO.
	WATER CONTRACTOR		15m	7-006		0240		RS		CONTRANENT CARCITOSON (CONTRANENT EN INTERNACIONAL CONTRANENT EN INTERNACIONAL CONTRAN	econtember organistic production of the producti		STORMOOT ENTERINGENEESTERMAN			
		ANALYSES		SAMPLE	REQUESTED	REQU				en e			ER NO:	WORK ORDER NO:		E.T.R. NO:
11000	MOTOR SALES AND				Ö		2		Custody	0						Z
	]				)			)  = 		) <b>h</b> a						

# SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME: Apolit		DATE Received at Lab:	7.30.03		(Drinking water) for	ater) for	
WORKORDER:	400B	TIME Received at Lab: LOG IN DATE:	8-1-63		regulatory purposes: (Wastewater) for		YES/NO
					regulatory purposes:		YES/NO
CIRCLE THE APPROPRIATE RESPONSE	E LAB SAMPLE #	# CLIENT ID	DESCRIPTION	SAMPLE DATE MATRIX SAMPLED	DATE SAMPLED	CONDITION (ETC.)	N (ETC.)
1. Custody Seal(s) Present / Absent	Å	3712-2601-2.5	MC	6	72403		
Intact / Broken*		am (C			Newson.		
2. Chain-of-Custody (Present ) Absent*		01		4			
3. Traffic Reports or		18E	オジノウチ	3			
Packing List: Present / Absent		2/	JU	(5)			
		20					
Present / Absen		25	a.edintoreo				
5. Airbill #:		30					
6. Sample Labels: Present / Absent		302	estar establicativa				
7. Sample IDs: Listed/ Not Listed		35					
on Chain-of-Custody	У	40		+	+		
8. Sample Condition: Intact / Broken* /						Control and the second	
Leaking*							
9. Does information on			ſ	**************************************			
custody reports, traffic							
reports and sample		1		X			
labels agree? Yes/ No*			]/ ~				
10. Sample received within							
hold time: (Yes) No*				1	X		
11. Proper Preservatives			1				
used: (Yes)/ No*					// ×		
12. Temp Rec. at Lab:					1		
(Acceptance range for samples						1	
requiring thermal pres.:4+/-2°C)						/	

Sample Receipt Log Revision 2.1 (11/10/00) Replaces Revision 2 (11/06/00) Effective 17/12/00

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\*If Circled, contact Project Manager and attach record of resolution.